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## GS PAPER - I

**Paper 1 Topic:** Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

### Kathakar

**Context:** 7th edition of three day 'Kathakar: International Storytellers Festival' was recently inaugurated at the Indira Gandhi National Centre for the Arts (IGNCA), New Delhi. The partners for this year's festival are the IGNCA of Union Ministry of Culture in Delhi, Heritage Transport Museum in Gurugram and the NCPA in Mumbai.

**About Kathakar:**

- **What is it?** Kathakar is the only oral storytelling festival in India and is a part of Ghummakkad Narain- the Travelling Literature Festival which was started under the aegis of UNESCO in 2010. Kathakar is an attempt to not just preserve the art form but also create new audiences for the same.

**Background:**

Kathakar is a special initiative within the bigger festival, Ghummakkad Narain, to promote the oral storytelling tradition which has existed across the world. Though performance storytelling has seen a revival in Europe, in India only few efforts have been made to contemporize the art form.

Sources: pib.

### Hornbill Festival

**Context:** Hornbill Festival was celebrated on the State Formation Day of Nagaland on December 1. The Hornbill Festival is the perfect showcase of rich Naga culture and traditions, preserved over the years in the form of music, dance and food.



**About the Hornbill Festival:**

- Hornbill Festival is the most anticipated festivals of Nagaland held between December 1<sup>st</sup> to December 10<sup>th</sup> every year.
- The aim of the festival is to revive and protect the rich culture of Nagaland and display its traditional extravaganza. All the tribes of Nagaland, around 16, take part in this week long festival, with utmost zeal.
- The Hornbill festival is named after the hornbill bird. The bird is highly respected and its importance is reflected in tribal folklore, songs and dances.

Sources: pib.

### Kumbh Mela

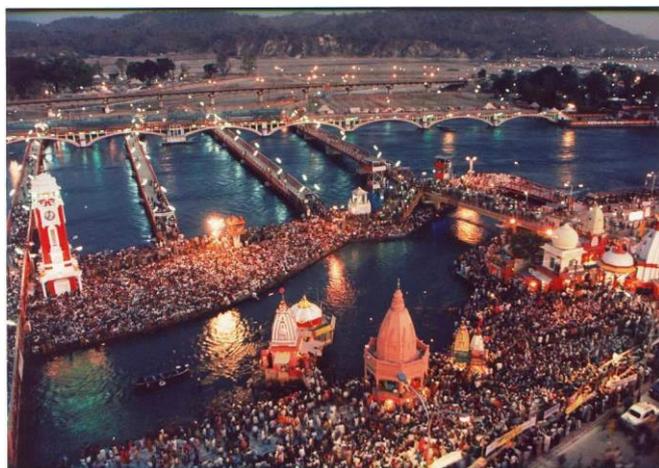
**Context:**

The Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage under UNESCO has inscribed 'KumbhMela' on the Representative List of Intangible Cultural Heritage of Humanity during its 12th session being held at Jeju, South Korea.

This inscription is the third in two years following the inscriptions of 'Yoga' and 'Nouroz' in December.

**About Kumbh Mela:**

Kumbh Mela is the largest peaceful congregation of pilgrims on earth. The festival, held in Allahabad, Haridwar, Ujjain



and Nasik, represents a syncretic set of rituals related to worship and ritual cleansing in holy rivers in India. As a religious festival, the tolerance and inclusiveness that Kumbh Mela demonstrates are especially valuable for the contemporary world.

### **What is intangible cultural heritage?**

The UNESCO Convention for Safeguarding the Intangible Cultural Heritage, adopted in 2003, defines intangible cultural heritage as the practices, representations, expressions as well as knowledge and skills that communities, groups and, in some cases, individuals recognise as part of their cultural heritage.

Sources: the hindu.

## BODHI PARVA

### **Context:**

India is hosting the 2017 edition of “Bodhi Parva: BIMSTEC Festival of Buddhist Heritage” in New Delhi as part of celebrations of 20th Anniversary of BIMSTEC. The festival is organized by the Ministry of External Affairs (MEA) along with Teamwork Arts.

### **Why This Festival?**

To emphasise and raise awareness of this rich and common heritage and mark the 20th anniversary of this unique organisation group, a BIMSTEC Buddhism Festival “Bodhi Parva: BIMSTEC Festival of Buddhist Heritage” has been presented by the BIMSTEC division of the Ministry of External Affairs and produced by Teamwork



Arts.

A mélange of international performances, films, art, chanting, meditation and philosophical dialogues by known practitioners and scholars will bring out the essence of Buddhism. The universal message of peace and tolerance practiced by Buddhism can address the growing sense of inadequacy in the face of changes and conflicts that people and the world face.

### **About Bodhi Parva:**

“Bodhi Parva: BIMSTEC Buddhist Heritage Festival” aims to look at the different aspects of Buddhism, in today’s context. BIMSTEC has a deep connect with Buddhism, which originated in South Asia and then travelled and rooted itself in South East Asia. Buddhism constitutes a bridge between South and South-East Asia.

### **About BIMSTEC:**

- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organization involving a group of countries in South Asia and South East Asia. The BIMSTEC comprises of seven countries, Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.
- The main objective of BIMSTEC is technological and economical cooperation among South Asian and South East Asian countries along the coast of the Bay of Bengal. The headquarters of BIMSTEC is in Dhaka.

Sources: pib.

## 27th Vyas Samman

### **Context:**

Eminent Hindi writer Mamta Kalia will be honoured with literary award Vyas Samman for year 2017 for her novel “Dukkham Suddham”. The author has earlier received “Yashpal Katha Samman” from Uttar Pradesh Hindi Sansthan, “Sahitya Bhushan Samman” and “Ram Manohar Lohia Samman”.

### **About Vyas Samman awards- facts:**

- The Vyas Samman is given to a Hindi literary work published in the past 10 years.
- Eminent literary critic and poet Ram Vilas Sharma is the first recipient of this award in 1991.
- The writer will receive an amount of Rs 3.5 lakh as the prize money.
- It is awarded annually by the K.K. Birla Foundation.

## UNWTO/UNESCO World Conference on Tourism and Culture

The **Second UNWTO/UNESCO World Conference on Tourism and Culture** is being held in **Muscat, Sultanate of Oman**.

**Objective of the conference:** It will bring together, for the second time, Ministers of Tourism and Ministers of Culture as well as private sector stakeholders and experts with the objective of building and strengthening partnerships between the Tourism and Culture sectors and enhance their role in the UN's 2030 Agenda for Sustainable Development.

**Aim of the conference:** The conference aims to address a wide range of topics, including governance models, tourism development and protection of cultural heritage, culture and tourism in urban development and creativity, and exploring cultural landscape in tourism as a vehicle for sustainable development in destinations worldwide.

### **Background:**

This Conference is a sequel to the First UNWTO/UNESCO World Conference on Tourism and Culture, held in Siem Reap, Cambodia in February 2015 and will provide the platform to reflect upon the Siem Reap Declaration that pledged to explore the synergies of the tourism and culture sectors to work in harmony for sustainable development.

### **Significance of this conference:**

The United Nations has declared 2017 as the International Year of Sustainable Tourism for Development, thereby offering a unique opportunity to explore and highlight tourism's potential to help transform the world into a place of prosperity and wellbeing for all. In this context, the second UNWTO/UNESCO World Conference on Tourism and Culture features prominently as one of the official events on the calendar of activities of the International Year of Sustainable Tourism for Development.

### **About UNWTO:**

#### What is it?

The World Tourism Organization (UNWTO) is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism.

#### Members:

UNWTO's membership includes 158 countries, 6 Associate Members and over 500 Affiliate Members representing the private sector, educational institutions, tourism associations and local tourism authorities.

#### What it does?

- As the leading international organization in the field of tourism, UNWTO promotes tourism as a driver of economic growth, inclusive development and environmental sustainability and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.
- UNWTO encourages the implementation of the Global Code of Ethics for Tourism, to maximize tourism's socio-economic contribution while minimizing its possible negative impacts, and is committed to promoting tourism as an instrument in achieving the Sustainable Development Goals (SDGs), geared towards reducing poverty and fostering sustainable development worldwide.
- UNWTO generates market knowledge, promotes competitive and sustainable tourism policies and instruments, fosters tourism education and training, and works to make tourism an effective tool for development through technical assistance projects in over 100 countries around the world.

Sources: pib.



Second UNWTO/UNESCO  
World Conference on Tourism and Culture:  
**Fostering Sustainable Development**

Muscat, Sultanate of Oman. 11-12 December 2017

[www.tourismandculture.org](http://www.tourismandculture.org)

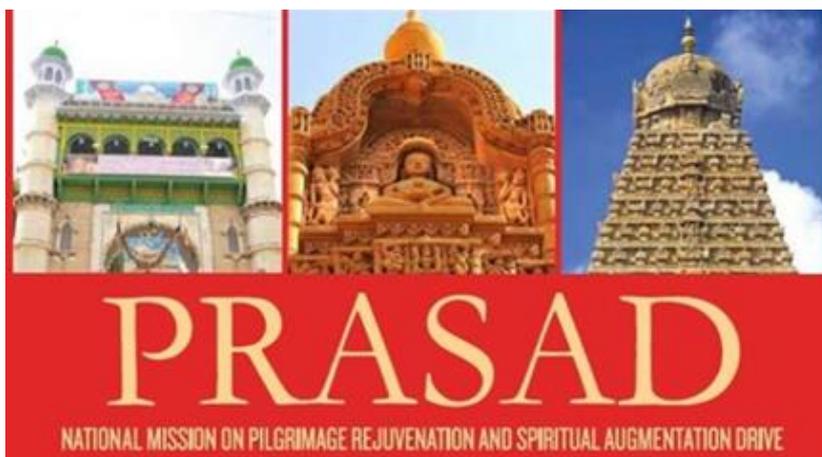
## ‘Prasad’ scheme

**Context:** The parliamentary standing committee on transport, tourism and culture has referred to the tourism ministry’s flagship **Pilgrimage Rejuvenation and Spiritual Augmentation Drive (Prasad) scheme** as one whose conceptualisation is “radically wrong” and which needs a “complete relook”.

### **What’s the issue?**

The standing committee noted that the scheme was not running properly even three years after its launch. It said, “States are not actually buying the idea of tourism department and their plan. The committee visited Karnataka, Andhra Pradesh and Telangana and during deliberations of the committee, it came to know that they have their own tourism policy. But it seems there is no coordination with the central government.” The standing committee was also dissatisfied with the government’s response blaming state government agencies for the delay.

The committee also notes that there is something radically wrong with the conceptualisation of the ‘Prasad’ scheme itself. The committee finds that study of the ‘Prasad’ scheme shows that it has not been properly conceived at all. Even today, without government intervention, there are many other well operated religious circuits in the country.” The standing committee recommended that the ministry undertake a “complete relook” of the scheme.



### **About PRASAD scheme:**

PRASAD scheme aims to create spiritual centres for tourism development within the nation. To implement the PRASAD scheme a Mission Directorate has been set up in the Ministry of Tourism.

**Twelve cities** namely Amaravati (Andhra Pradesh), Gaya(Bihar), Dwaraka(Gujarat), Amritsar(Punjab), Ajmer(Rajasthan), Kanchipuram(Tamil Nadu), Vellankani(Tamil Nadu), Puri(Odisha), Varanasi(Uttar Pradesh), Mathura(Uttar Pradesh), Kedarnath (Uttarakhand) and Kamakhya (Assam) have been identified for development under Pilgrimage Rejuvenation and Spirituality Augmentation Drive (PRASAD) by the Ministry of Tourism.

Sources: the hindu.

**Paper 1 Topic:** Salient features of Indian Society, Diversity of India.

## Uniform Civil Code

**Context:** Observing that the Uniform Civil Code cannot be violative of any provision of the constitution, the Law Commission has said that it is planning to recommend religion-wise “piece meal” amendments to family laws if it finds it difficult to come out with a composite uniform civil code. The commission is in the process of segregating the nearly 45,000 suggestions it has received on its questionnaire on the uniform civil code.

### **Background:**

Amid a raging debate on uniform civil code, the law panel had in October last year sought public views on the subject to revise and reform family laws, saying the aim is to address social injustice rather than to do away with the plurality of laws. In an appeal issued then, the commission had said the objective behind the endeavor is to address discrimination against vulnerable groups and harmonize various cultural practices.

### **What is uniform civil code?**

Uniform civil Code is a proposal to have a generic set of governing laws for every citizen without taking into consideration the religion.

### **What the constitution says?**

Article 44 of the Constitution says that there should be a Uniform Civil Code. According to this article, “The State shall endeavor to secure for the citizens a uniform civil code throughout the territory of India”. Since the Directive Principles are only guidelines, it is not mandatory to use them.

### India needs a Uniform Civil Code for the following reasons:

- A secular republic needs a common law for all citizens rather than differentiated rules based on religious practices.
- Another reason why a uniform civil code is needed is gender justice. The rights of women are usually limited under religious law, be it Hindu or Muslim. The practice of triple talaq is a classic example. Many practices governed by religious tradition are at odds with the fundamental rights guaranteed in the Indian Constitution.
- Courts have also often said in their judgements that the government should move towards a uniform civil code including the judgement in the Shah Bano case.

#### The Pros of UCC

1. Provide equal status to all citizens.
2. Promote gender parity.
3. Accommodate the aspirations of the young population.
4. To support the national integration.
5. Bypass the issue of reform of existing personal laws.

#### The Cons of UCC

1. Practical difficulties due to diversity in India.
2. Perception of UCC as encroachment on religious freedom.
3. Interference of state in personal matters.
4. It is a sensitive and tough task to implement.
5. The Time is not yet suitable for this reform.

Sources: ET.

## Minority tag for Hindus: NCM forms committee

The National Commission for Minorities (NCM) has formed a three-member committee to look into whether Hindus should get minority status in eight states where they are not the dominant religious group. The committee will submit a report on this in three months.



### Background:

Hindus are in a minority in Lakshadweep (2.5%), Mizoram (2.75), Nagaland (8.75), Meghalaya (11.53), J&K (28.44), Arunachal Pradesh (29), Manipur (31.39) and Punjab (38.4). It is argued that in the absence of the “minority” tag, benefits meant for the minority communities were being given away to majority community in each state in an illegal and arbitrary manner.

### About NCM:

The Union Government set up the National Commission for Minorities (NCM) under the National Commission for Minorities Act, 1992. **Six** religious communities, viz; **Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis) and Jains** have been notified in Gazette of India as minority communities by the Union Government all over India. Original notification of 1993 was for **Five** religious communities Sikhs, Buddhists, Parsis, Christians and Muslims.

The NCM adheres to the United Nations Declaration of 18 December 1992 which states that “States shall protect the existence of the National or Ethnic, Cultural, Religious and Linguistic identity of minorities within their respective territories and encourage conditions for the promotion of that identity.”

Sources: the hindu.

### Paper 1 Topic: Role of women and women's organization

## Adultery law

### Context:

Supreme court has issued a notice to the Centre on a public interest litigation challenging the constitutionality of IPC section 497 dealing with adultery, saying it appeared to be “archaic” and did not appear to be gender-neutral.

The court will examine two aspects of the penal provision:

- One, why does Section 497 treat the man as the adulterer and the married woman as a victim?

- Two, the offence of adultery ceases the moment it is established that the husband connived or consented to the adulterous act. So, is a married woman the “property” of her husband, a passive object without a mind of her own?

#### Background:

The court is hearing a petition challenging the constitutionality of Section 497 IPC read with Section 198(2) of the CrPC. The petition says, Section 497 IPC is unconstitutional as it discriminates against men and violates Article 14, 15 and 21.

- Section 497 IPC says**, “Whoever has sexual intercourse with a person who is and whom he knows or has reason to believe to be the wife of another man, without the consent or connivance of that man, such sexual intercourse not amounting to the offence of rape, is guilty of the offence of adultery, and shall be punished with imprisonment of either description for a term which may extend to five years, or with fine, or with both. In such case the wife shall not be punishable as an abettor.”
- Section 198(2) CrPC says that** “... no person other than the husband of the woman shall be deemed to be aggrieved by any offence punishable under Section 497 or Section 498 of the said Code: Provided that in the absence of the husband, some person who had care of the woman on his behalf at the time when such offence was committed may, with the leave of the Court, make a complaint on his behalf.”



#### Way ahead:

Adultery is at best a violation of the terms of agreement between a married couple. The IPC version of criminalising adultery with five years imprisonment is just a more moderate version of the Islamic versions which see it as a grave offence that deserves barbaric punishments like stoning and lashing. Such laws serve as encouragement to peep into people’s bedrooms though only the husband can make a complaint. It is possible that common law jurists conceived an adultery law to prevent duels between the wronged husband and the lover or to give the husband a legal device to hit back at the wife and her lover. Most countries in the West have decriminalized adultery. India should follow their example rather than split hairs over making it gender just.

Sources: the hindu.

## Triple talaq draft bill

#### Context:

Uttar Pradesh has become the first state to endorse the centre’s draft bill that makes instant triple talaq a **cognisable and non-bailable offence**.

#### Background:

The Supreme Court had on August 22 struck down triple talaq, calling the practice unconstitutional and in violation of Article 14 of the Constitution, which provides

for equality before the law. Following this, the Centre came out with the draft Bill on triple talaq. It has been endorsed by the Cabinet. Since marriage and divorce are subjects that fall under the concurrent list of the Constitution, the law ministry has also written to state governments seeking their views “urgently” on the proposed legislation.

#### What is triple talaq ?

Talaq-e-biddat is a custom under Muslim personal law that allows a man to divorce his wife by uttering the word “talaq” thrice.

### Instant Triple Talaq draft law

- Centre’s draft law turns instant triple talaq into “cognizable and non-bailable” offence
- The offence can be punishable with 3 years jail and a monetary fine
- Under the Muslim Women (Protection of Rights on Marriage) Act, instant triple talaq in “oral, written, electronic or any other form” shall be “illegal and void”
- The draft law also allows a woman who has been given instant triple talaq to move court, seeking “subsistence allowance” for herself and dependent children, as well as custody of minor children

Key features of the Draft 'Muslim Women Protection of Rights on Marriage Bill':

- As per the draft, triple talaq or talaq-e-biddat will be a “cognisable and non-bailable” offence punishable with three years imprisonment and the wife will be entitled to maintenance and the custody of children if they are minor.
- The proposed law would only be applicable on instant triple talaq or ‘talaq-e-biddat’ and it would give power to the victim to approach a magistrate seeking “subsistence allowance” for herself and minor children. The woman can also seek the custody of her minor children from the magistrate who will take a final call on the issue.
- Under the draft law, triple talaq in any form — spoken, in writing or by electronic means such as email, SMS and WhatsApp — would be bad or illegal and void.
- The provision of subsistence allowance and custody has been made to ensure that in case the husband asks the wife to leave the house she should have legal protection.

Sources: the hindu.

**“Safe City Surveillance” scheme**

**Context:** Bihar state government has approved a “Safe City Surveillance” scheme aimed at putting a check on eve-teasing and other crimes against women at public places across the state.

**About the Scheme:**

- The scheme will bring all major public places under the watch of close-circuit television (CCTV) cameras and improve the overall crime control in the state.
- This scheme is especially being launched for checking crime against women, such as eve-teasing and molestation, harassment, snatching incidents and roadside scuffles etc. It will also help in keeping a track of miscreants.
- The scheme, which will be launched in a phase-wise manner, will commence from capital Patna.
- The Bihar home department will be the nodal agency for implementation of the safe-city surveillance scheme.



Sources: the hindu.

**Buenos Aires Declaration on Women and Trade**

**Context:** For the first time in the history of the **World Trade Organization**, WTO members and observers have endorsed a collective initiative to increase the participation of women in trade. In order to help women reach their full potential in the world economy, 118 WTO members and observers agreed to support the Buenos Aires Declaration on Women and Trade, which seeks to remove barriers to, and foster, women’s economic empowerment.

- Supporting WTO members and observers have specifically agreed to explore and find ways to best tackle barriers to trade, lack of access to trade financing and sub-optimal participation of women in public procurement markets.

**India’s stand:**

- India, an influential WTO member, was among the minority group that chose not to endorse the move saying while it stoutly supports gender equality, it cannot concur with the view that gender is a trade-related issue. Agreeing to the proposition to link gender and trade could lead to advanced countries using their high standards in gender-

related policies to not only curb exports from the developing world, but also indirectly restrict developing countries from incentivising their women citizens as part of measures to address developmental challenges.

- India also observed that gender-related discussions should take place at appropriate fora and not at the WTO, which is purely a trade-related body. Otherwise, it will set a precedent to bring in other non-trade issues such as labour and environment standards into the WTO's ambit.

#### **Background:**

Currently, many women worldwide stand on the sidelines of the economy. While women comprise about half of the global population, they generate only 37% of gross domestic product (GDP) and run only about a third of small and medium-sized enterprises. In some developing countries, female business ownership can dip as low as 3-6%. An International Trade Centre survey in 20 countries found that just one in five exporting companies is owned by women. In more than 155 countries, there is at least one law impeding economic opportunities for women. No country has managed to close the gender gap on economic participation and opportunity; progress is so slow it would take, at the current rate, 170 years to reach gender equality. It is also apparent that international trade and trade agreements affect women and men differently.

#### **About Buenos Aires Women and Trade Declaration:**

It was spearheaded by the governments of Iceland and Sierra Leone, as well as the International Trade Centre. It stemmed from efforts made by the Trade Impact Group of the International Gender Champions, a leadership network that brings female and male decision-makers together to break down gender barriers. The declaration seeks women's economic empowerment by expeditiously removing barriers to trade.

Sources: the hindu.

## Sakhi One Stop Centres

#### **Context:**

A National Workshop on Role of Sakhi One Stop Centres in Strengthening Multi Sectoral Response to Violence is being held in New Delhi. The workshop has been organized by the Ministry of Women and Child Development. Around 400 Sakhi- One Stop Centre Functionaries and nodal officials from State Department of Women and Child Development from 33 States/UTs across the country, are participating in the workshop.

The conference provides platform to understand, discuss and deliberate on strengthening the multisector response to address violence against women through the Sakhi One Stop Centres across the country.

#### **About the Sakhi scheme:**

Popularly known as Sakhi, the scheme is being implemented since 1st April 2015. The scheme aims to facilitate access to an integrated range of services including medical aid, police assistance, legal aid/case management, psychosocial counselling, and temporary support services to women affected by violence.

Under the scheme, it has been envisaged that One Stop Centres (OSC) would be set up across the country in a phased manner.



Sources: pib.

## India's digital gender gap could further marginalise women: UNICEF

**Context:** UNICEF has released the 2017 edition of its annual flagship publication "The State of the World's Children Report". Themed "Children in a digital world", the latest report provides country-level examples to give a sense of the kinds of barriers girls and women confront.

### Highlights of the report:

- With less than one-third of India's internet users being females, the country's girls and women risk becoming further marginalised in society and at home if they remain digitally illiterate in the backdrop of the country making a public push towards a more digital economy.
- Globally, 12% more men than women used the internet in 2017. In India, where only 29% of all internet users are female, girls in rural areas often face restrictions on their use of ICTs solely because of their gender.
- Digital divides can mirror broader societal divides — between rich and poor, cities and rural areas, between those with or without an education — and between women and men. India is one place in which the digital divide highlights society's deep chasms.

### Causes for digital gender divide:

- Digital gender divide is caused by a number of factors — social norms, education levels, lack of technical literacy and lack of confidence among them — but is often rooted in parents' concern for the safety of their daughters. Many fear that allowing girls to use the internet will lead to liaisons with men, bringing shame on the family. For most girls, if they are allowed to use the internet, their every move is monitored by their parents or brothers.
- In a society that is still largely patriarchal, for girls, traits like deference and obedience are often valued over intelligence and curiosity. In some households, technology is not seen as necessary or beneficial for girls and women.

### Why bridging of digital gender gap is necessary?

If girls and women remain digitally illiterate, they risk becoming further marginalised in society and at home. Therefore, bridging gender gap is necessary. Besides, digital connection and literacy offer advantages in a knowledge-based society, improving children's lives and their future earning potential.

Sources: the hindu.

**Paper 1 Topic:** Population and associated issues, poverty and developmental issues, Urbanization, their problems and their remedies.

## Green habitat

**Context:** The Kerala government is considering promoting a 'green habitat' concept giving thrust to eco-friendly and reusable building materials, natural water storage and solid waste management. The objective of the concept is to introduce maximum eco-friendly and reusable materials in the construction.

### Features of the Green Habitat concept:

- The buildings, under the concept, are planned to be designed in such a way that natural sunlight and wind would be used to maximum and the usage of electricity reduces to the minimum.
- A rainwater harvesting or natural water storage system would be a sure feature of such 'green' buildings, where even kitchen and drainage water would be recycled and reused for other household purposes.

### Significance of this concept:

Not only the danger posed by unscientific construction practices, but also the scarcity of conventional building materials is a reason to draw up an alternative green habitat concept.

**Way ahead:**

Laws and legislation alone are not enough to implement the green habitat concept. A thorough grassroots level campaign is inevitable to create awareness about this among public and inculcate a green culture among them.

Sources: ET.

## Ganga Gram Project

**Context:** The Ministry of Drinking Water and Sanitation has launched the Ganga Gram Project under the Namami Gange Programme, for holistic sanitation development in villages on the banks of River Ganga. These villages will set the bench mark of cleanliness and integrated effort of development. These will be converted into Ganga Grams by 31st December 2018.

**About Ganga Gram project:**

Ganga Gram vision is an integrated approach for holistic development of villages situated on the banks of River Ganga with active participation of the villagers. The objectives of Ganga Gram Project include solid and liquid waste management, renovation of ponds and water resources, water conservation projects, organic farming, horticulture, and promotion of medicinal plants.

**About Namami Gange Programme:**

Namami Gange programme was launched as a mission to achieve the target of cleaning river Ganga in an effective manner with the unceasing involvement of all stakeholders, especially five major Ganga basin States – Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal. The programme envisages: River Surface Cleaning, Sewerage Treatment Infrastructure, River Front Development, Bio-Diversity, Afforestation and Public Awareness.

**Implementation:**

- The program would be implemented by the National Mission for Clean Ganga (NMCG), and its state counterpart organizations i.e., State Program Management Groups (SPMGs). In order to improve implementation, a three-tier mechanism has been proposed for project monitoring comprising of a) High level task force chaired by Cabinet Secretary assisted by NMCG at national level, b) State level committee chaired by Chief Secretary assisted by SPMG at state level and c) District level committee chaired by the District Magistrate.
- The program emphasizes on improved coordination mechanisms between various Ministries/Agencies of Central and State governments.

Sources: the hindu.

## Cities need a sustainable transport update

**Context:** Bengaluru's never-ending traffic jam and Delhi's pollution levels has made it resoundingly clear that the present model of urban transport is unsustainable, and the only way out of the cycle—of rising incomes and more wheels on the road—is an efficient public transport alternative.

### **What made the present model of urban public transport unsustainable?**

City-development plans have failed to create the right incentives, as is borne out by the preference for private transport. The problem starts with the way cities are governed in India. The lack of adequate devolution as per the Constitution (74th Amendment) Act, 1992, and consequently, effective power vested in a city-level governance mechanism, exacts a heavy toll.

### **What needs to be done?**

The urban transport policy must rethink the hierarchy of needs; pedestrians and cyclists must be on top, followed by buses and then motor vehicles.

**Metros:** The government must pivot the policy to delivering reliable public transport. The metro project is a step in the right direction, but it needs complementary changes that improve the citizens' experience. The metro system needs a bus system to provide last-mile connectivity.

**Buses:** If people have to take buses, they need pedestrian paths to walk on the roads. The bus system also needs to be reliable. A centralized monitoring system that tracks buses using GPS is needed. Such system monitors driving speed and ensures that they stop at every bus stop.

**Change in government's attitude:** The government must resist using attractive-sounding propositions, like pushing electric and hybrid buses, to give the impression that there is political will to improve urban transport. Changing the fuel of the bus will reduce emissions, but there will be dramatically bigger gains if we are able to prompt even a quarter of the private vehicle-using population to use public transport.

**Maintenance:** India has plenty of assets that are decaying due to poor maintenance. Policymakers will do well to make space for depreciation accounts in their budgets to pay for maintenance and replacement of public assets.

### **Way ahead:**

India is a growing economy, and census data suggests that only 31% of the population lives in urban centres. Another 300 million people will be added by 2050 and the planning for carrying those people in our cities must begin now. Public transport can easily be the cheaper, faster and economical alternative if policymakers plan for tomorrow's problems today.

Sources: livemint.

**Paper 1 Topic:** Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc.

## Cyclone Ockhi

**Context:** The deep depression which had formed in the Bay of Bengal near Kanyakumari district in Tamil Nadu, bordering Kerala, has now intensified into a cyclonic storm named Ockhi.

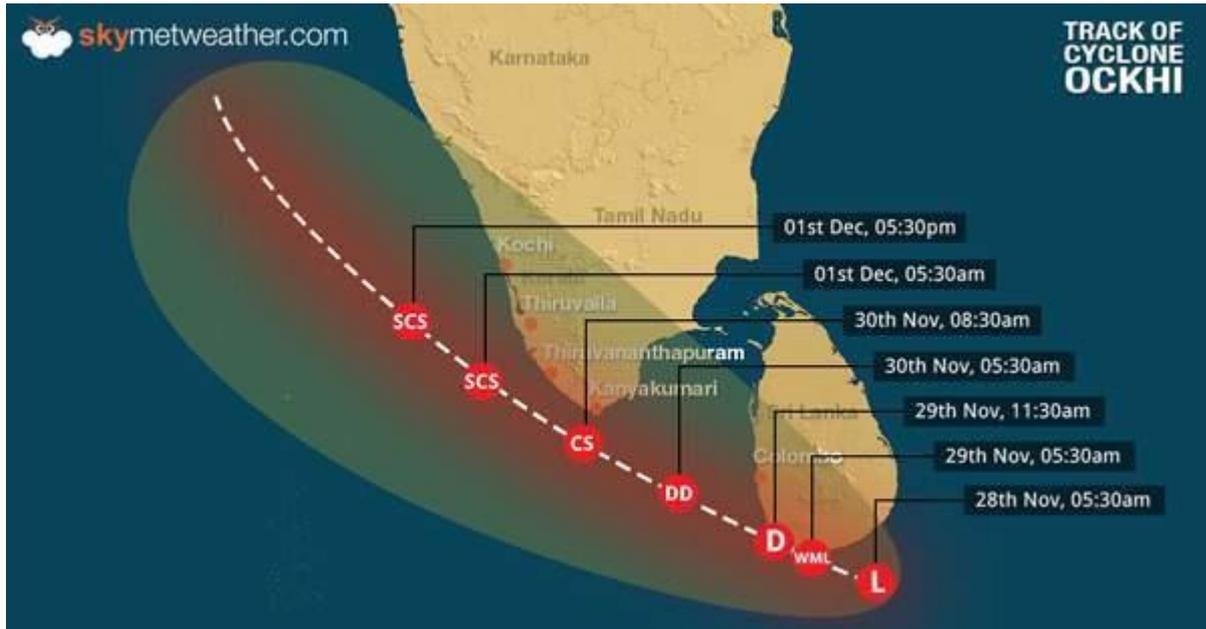
The name Ockhi was given by Bangladesh which in Bengali means 'eye'.

### **How are cyclones named?**

The World Meteorological Organisation (WMO) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) started the tropical cyclone naming system in 2000. Tropical cyclones are named to provide ease of communication between forecasters and the general public regarding forecasts, watches, and warnings.

**The Cyclones worldwide are named by 9 regions** — North Atlantic, Eastern North Pacific, Central North Pacific, Western North Pacific, North Indian Ocean, South West Indian Ocean, Australian, Southern Pacific, South Atlantic. *Cyclones in the North Indian Ocean basin are named by the Indian Meteorological Department* and the first tropical cyclone was named in 2004 as Onil (given by Bangladesh).

**Eight north Indian Ocean countries** — Bangladesh, India, the Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand, gave eight names each which was combined into a list of 64 names. One name from each country is picked in an order to name the cyclones.



The previous storm Mora that caused severe flooding across Northeast India in May was named by Thailand. Mora is the name of one of the healing stones and also means star of the sea. The next cyclone will be named Sagar — a name given by India.

Sources: the hindu.

## Solar wind flows

### Context:

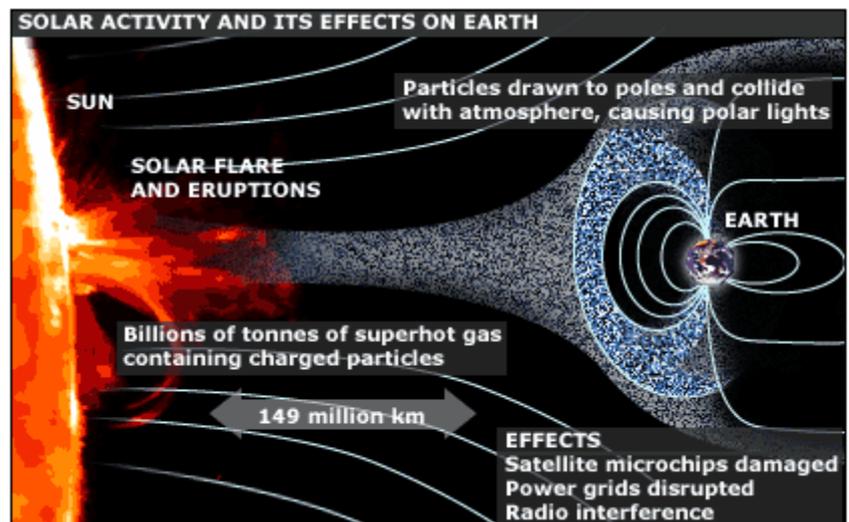
A group of researchers from Physical Research Laboratory (PRL), Ahmedabad, have, for the first time, figured out the conditions under which certain types of solar storms can flow towards the earth and affect its atmosphere.

### What are solar storms?

Solar storms are violent events on the sun which can temporarily distort the earth's magnetosphere – the region around the earth which is influenced by its magnetic field.

### Effects of solar storms:

- These temporary disturbances, called geomagnetic storms, can generate shock waves in the interplanetary medium that can accelerate charged particles to very high energies and which, in turn, can harm the satellites placed by humans in space.
- Such solar storms have two causes: Coronal Mass Ejections (CME) and Corotating Interaction Regions (CIR). CMEs are huge explosions of charged particles extending beyond the sun's corona or outer layer and can be visibly observed. CMEs can be detected by a coronagraph when they are ejected from the Sun.
- CIRs: Charged particles are being spewed continually out of the sun's corona, forming the solar wind. Some parts of these winds move faster than others. Since they contain charged particles in a plasma state, these different regions physically interact with each other to form wavelike disturbances called CIRs that emanate from the sun and spiral outwards. CIRs are generated in the interplanetary medium and there are no visual signatures for CIRs. They are called "corotating" interaction regions as they rotate along with the sun, attached to it at one end.



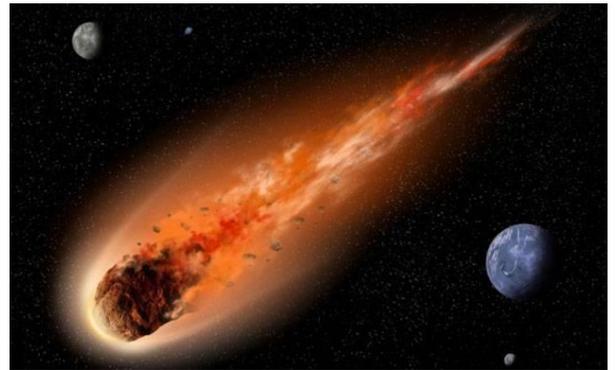
## Why meteoroids explode before reaching Earth decoded

A recent study found that our atmosphere is a better shield from meteoroids than previously thought. So far, researchers knew that meteoroids often blew up before they reach the Earth's surface, but they did not know why.

### ***But, why meteoroids explode before reaching Earth?***

When a meteor comes hurtling towards Earth, the high-pressure air in front of it seeps into its pores and cracks, pushing the body of the meteor apart and causing it to explode.

There is a big gradient between high-pressure air in front of the meteor and the vacuum of air behind it. If the air can move through the passages in the meteorite, it can easily get inside and blow off pieces.



Sources: et.

## GS PAPER - II

**Paper 2 Topic:** *Salient features of the Representation of People's Act.*

### SC agrees to examine plea to bar politicians from contesting from two seats

**Context:** The Supreme Court has agreed to adjudicate on whether politicians could be barred from contesting from more than one seat in an election and has sought assistance from the Attorney General (AG) to decide the issue.

**Background:**

A petition has been filed in the Supreme Court challenging Section 33(7) of the Representation of the People Act of 1951 that allows a person to contest elections to Parliament and state assemblies from two constituencies and sought an end to the practice.

**Section 33(7) of RPA:**

Section 33(7) of the Representation of People's Act permits a candidate to contest any election (Parliamentary, State Assembly, Biennial Council, or bye-elections) from up to two constituencies. The provision was introduced in 1996 prior to which there was no bar on the number of constituencies from which a candidate could contest.

**Why candidates should be barred from contesting from more than one seat?**

One person, one vote & one candidate, one constituency is the dictum of democracy. However, as per the law, as it stands today, a person can contest the election for the same office from two constituencies simultaneously. When a candidate contests from two seats, it is imperative that he has to vacate one of the two seats if he wins both. This, apart from the consequent unavoidable financial burden on the public exchequer, government manpower and other resources for holding bye-election is also an injustice to the voters of the constituency which the candidate is quitting from.

**Alternative suggested by the Election commission:**

The ECI has alternatively suggested that if existing provisions are retained then the candidate contesting from two seats should bear the cost of the bye-election to the seat that the contestant decides to vacate in the event of his/her winning both seats. The amount in such an event could be Rs 5 lakh for assembly election and Rs 10 lakh for parliament election.

Sources: the hindu.

### The Representation of the People (Amendment) Bill of 2017

**Context:**

The Representation of the People (Amendment) Bill of 2017 has been introduced by the government in the Parliament.

**Highlights of the Bill:**

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

**What necessitated this move?**

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

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

**Significance of this move:**

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

Sources: the hindu.

*Paper 2 Topic: Structure, organization and functioning of the Executive and the Judiciary Ministries and Departments of the Government;*

## Special courts to try politicians

**Context:**

In a decision intended to end the inordinate delay in the prosecution of politicians in criminal cases, the Centre has decided to set up special courts to deal exclusively with cases against 1,581 MPs and MLAs with the aim of disposing of them in a year. This decision has been conveyed by the centre to the Supreme Court.

**What has the Centre proposed?**

Initially, 12 courts would be constituted. Two special courts would handle cases against 228 MPs and the other 10 would be set up in 10 states — Andhra, Bihar, Karnataka, Kerala, MP, Maharashtra, Tamil Nadu, Telangana, UP and Bengal—where the number of MLAs booked for criminal acts is more than 65. Disposing of 1,581 criminal cases involving political persons within a time frame of one year as directed by the SC is the aim as well as the objective of the scheme.

**Need for special courts:**

There are several high-profile cases against leaders from almost all political parties—regional and national where investigations have dragged on for years and those facing trial have evaded prison.

**Implications of this move:**

The Centre's decision could be a setback to politicians who, despite facing serious charges, have remained members of Parliament and state assemblies due to time consumed in trials. Such cases will fall in the purview of special courts and their fate will be decided expeditiously.

Sources: the hindu.

*Paper 2 Topic: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.*

## Autonomy of Election Commission

**Context:** The Supreme Court has sought the Attorney-General's assistance on a PIL petition pointing out the vagueness in the procedure for removal of Election Commissioners, saying it affects the Election Commission's autonomy.

**What's the issue?**

A petition has been filed in the Supreme Court arguing that though the proviso to Article 324 (5) of the Constitution safeguards the Chief Election Commissioner (CEC) from arbitrary removal, the same provision is silent about the procedure for removal of the two Election Commissioners.

It only provides that they cannot be removed from office except on the recommendation of the CEC. The petition said the ambiguity about the removal procedure of the Election Commissioners may affect the functional independence of the Commission.

**Constitutional provisions:**

The CEC and the Election Commissioners have a tenure of six years, or up to the age of 65, whichever is earlier, and enjoy the same status and receive salary and perks as available to Supreme Court judges.

**Removal of ECs:** The CEC and the Election Commissioners enjoy the same decision-making powers which is suggestive of the fact that their powers are at par with each other. However, Article 324(5) does not provide similar protection

to the Election Commissioners and it merely says that they cannot be removed from office except on the recommendation of the CEC.

### Way ahead:

The petition has asked the Supreme Court to provide Election Commissioners with the same protection against arbitrary removal as the Chief Election Commissioner. It is because the element of independence sought to be achieved under the Constitution is not exclusively for an individual alone but for the institution.

Sources: the hindu.

**Paper 2 Topic:** Statutory, regulatory and various quasi-judicial bodies.

## Controller General of Accounts

**Context:** The Controller General of Accounts, Department of Expenditure has launched the upgraded version of Central Pension Accounting Office (CPAO) primarily to cater to the needs of central civil pensioners and other stakeholders in the Ministries/Departments and Banks.

The website has been developed in-house by the NIC Wing of CPAO. The website provides a single window for both accessing pension related information and facilitating grievance Redressal of pensioners.

### About Controller General of Accounts:

#### What is it?

The Controller General of Accounts is the apex Accounting Authority of the Central Government and exercises the powers of the President under Article 150 of the constitution for prescribing the forms of Accounts of the Union and State Governments on the advice of the Comptroller & Auditor General of India.

**Functions:** It is the Principal Accounting Adviser to Government of India and is responsible for establishing and maintaining a technically sound Management Accounting System. The Office of CGA prepares monthly and annual analysis of expenditure, revenues, borrowings and various fiscal indicators for the Union Government.

#### OFFICER OF CONTROLLER GENERAL OF ACCOUNTS (CGA)

The CGA has the responsibility for **establishing and maintaining a technically sound accounting system** in the Departmentalised Accounts Offices. He, on behalf of the Ministries and Departments, liaises with the **Budget Division** and the **Comptroller and Auditor General of India** in accounting matters and provides necessary directions in accounting matters to the Ministries/ Departments and issues general instructions about the system and form of accounts and procedures for accounting of receipts and payments.

### Facts for Prelims:

Under Article 150 of the Constitution, the Annual Appropriation Accounts (Civil) and Union Finance Accounts are submitted to Parliament on the advice of Comptroller and Auditor General of India.

Sources: pib.

## Small Farmers' Agri-Business Consortium (SFAC)

**Context:** Union Agriculture and Farmers Welfare Minister, Shri Radha Mohan Singh recently chaired the 22nd meeting of Board of Management (BOM) of Small Farmers' Agri-Business Consortium (SFAC). Various activities of SFAC were reviewed during the meeting.

### About SFAC:

#### What is it?

Small Farmers Agribusiness Consortium (SFAC) is an Autonomous Society promoted by Ministry of Agriculture, Cooperation and Farmers' Welfare, Government of India. It was registered under Societies Registration Act 1860. The Society is also registered as Non-Banking Financial Institution by Reserve Bank of India.

#### SMALL FARMER AGRICULTURE CONSORTIUM

Linking smallholders to the agri value chain

Venture Capital Assistance Scheme  
Small Farmers' Agribusiness Consortium  
(Dept. of Agriculture and Cooperation)  
Govt. of India

**Management:** The Society is governed by Board of Management which is chaired, ex-officio, by Hon'ble Union Minister for Agriculture and Farmers Welfare as the President and the Secretary, Department of Agriculture, Cooperation and Farmers Welfare, Government of India, is the ex-officio Vice-President.

**Functions:** SFAC is implementing the central schemes of Government of India namely VCA, EGCGS for economic inclusion of small and marginal farmers in agribusiness activities. Society is pioneer in organising small and marginal farmers as Farmers Interest Groups, Farmers Producers Organisation and Farmers Producers Company for endowing them with bargaining power and economies of scale. Recently the Society has been entrusted with the task of implementation of the critically important Delhi KisanMandi and National Agriculture Market Scheme on e-platform to progressively free agricultural trade and offer price discovery to farmers.

Sources: pib.

## NGT to form one-member benches

**Context:** Amending the National Green Tribunal (Practices and Procedure) Rules, 2011, the Centre has passed a notification allowing the NGT chairperson to “constitute a single-member bench” in “exceptional circumstances.” However, the notification does not define the “exceptional circumstances”.

According to the earlier rules, the bench consisted of “two or more members” with at least one judicial member and another expert.

### **About the National Green Tribunal (NGT):**

#### What is it?

- NGT has been established under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.
- **Ambit:** The tribunal deals with matters relating to the enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property.

#### **Other facts:**

- The Tribunal is not bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.
- The Tribunal's dedicated jurisdiction in environmental matters shall provide speedy environmental justice and help reduce the burden of litigation in the higher courts.
- The Tribunal is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.

#### **Members:**

- **Sanctioned strength:** currently, 10 expert members and 10 judicial members (although the act allows for up to 20 of each).
- **Chairman:** is the administrative head of the tribunal, also serves as a judicial member and is required to be a serving or retired Chief Justice of a High Court or a judge of the Supreme Court of India.
- **Selection:** Members are chosen by a selection committee (headed by a sitting judge of the Supreme Court of India) that reviews their applications and conducts interviews. The Judicial members are chosen from applicants who are serving or retired judges of High Courts.
- **Expert members** are chosen from applicants who are either serving or retired bureaucrats not below the rank of an Additional Secretary to the Government of India (not below the rank of Principal Secretary if serving under a state government) with a minimum administrative experience of five years in dealing with environmental matters. Or, the expert members must have a doctorate in a related field.

Sources: the Indian express.

## Insolvency and Bankruptcy Board of India (IBBI)

**Context:** The Insolvency and Bankruptcy Board of India (IBBI) has notified the regulations for handling of grievances and complaints against Insolvency-related service providers.



### भारतीय दिवाला और शोधन अक्षमता बोर्ड Insolvency and Bankruptcy Board of India

#### Highlights:

- The regulations enable a stakeholder, namely, debtor, creditor, claimant, service provider, resolution applicant or any other person having an interest in an insolvency resolution, liquidation or bankruptcy transaction to file a grievance or a complaint against service provider.
- The service provider could be an insolvency professional agency, Insolvency professional, Insolvency professional entity or information utility.
- The regulations provide for an objective and transparent procedure for disposal of grievances and complaints by the IBBI. The regulations do not spare a mischievous service provider. At the same time, they don't also harass an innocent service provider.

#### About IBBI:

##### *What is it?*

Insolvency and Bankruptcy Board of India was set up on 1st October 2016 under the Insolvency and Bankruptcy Code, 2016 (Code). It is a unique regulator: regulates a profession as well as transactions.

#### Functions:

- It has regulatory oversight over the Insolvency Professionals, Insolvency Professional Agencies and Information Utilities.
- It writes and enforces rules for transactions, namely, corporate insolvency resolution, corporate liquidation, individual insolvency resolution and individual bankruptcy under the Code.
- It is a key pillar of the ecosystem responsible for implementation of the Code that consolidates and amends the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals.
- This is done in a time bound manner for maximization of the value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders.

#### Organizational structure of IBBI:

The IBBI has a ten-member board including a Chairman. Following is the structure of the IBBI:

- One Chairperson.
- Three members from Central Government officers not below the rank of Joint Secretary or equivalent.
- One nominated member from the RBI.
- Five members nominated by the Central Government; of these, three shall be whole-time members.

Sources: pib.

## Medical Council of India

**Context:** The Union Cabinet has cleared the National Medical Commission Bill, which does away with the Medical Council of India (MCI) and replaces it with a regulator that will do away with "heavy handed regulatory control" over medical institutions and will also bring in a national licentiate examination.

#### Key features of the Bill:

- The bill provides for the constitution of four autonomous boards entrusted with conducting undergraduate and postgraduate education, assessment and accreditation of medical institutions and registration of practitioners under the National Medical Commission.

- According to the draft bill, the commission will have government nominated chairman and members, and the board members will be selected by a search committee under the Cabinet Secretary. There will five elected and 12 ex-officio members in the commission.
- As per the Bill, the government, under the National Medical Commission (NMC), can dictate guidelines for fees up to 40% of seats in private medical colleges. This is aimed at giving students relief from the exorbitant fees charged by these colleges and is a standout feature of the bill.
- The bill also has a provision for a common entrance exam and licentiate (exit) exam that medical graduates have to pass before practising or pursuing PG courses. For MBBS, students have to clear NEET, and before they step into practice, they must pass the exit exam.
- Recognised medical institutions don't need the regulator's permission to add more seats or start PG course. This mechanism to reduce the discretionary powers of the regulator.
- Earlier, medical colleges required the MCI's approval for establishment, recognition, renewal of the yearly permission or recognition of degrees, and even increase the number of students they admitted. Under the new bill, the powers of the regulator are reduced to establishment and recognition. This means less red tape, but also less scrutiny of medical colleges.

#### Background:

The Medical Council of India was first established in 1934 under the Indian Medical Council Act, 1933. This Act was repealed and replaced with a new Act in 1956. Under the 1956 Act, the objectives of MCI include:

- Maintenance of standards in medical education through curriculum guidelines, inspections and permissions to start colleges, courses or increasing number of seats.
- Recognition of medical qualifications.
- Registration of doctors and maintenance of the All India Medical Register.
- Regulation of the medical profession by prescribing a code of conduct and taking action against erring doctors.

Sources: the hindu.

## Commissioner of Metro Railway Safety

**Context:** The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the creation of one circle office of Commissioner of Metro Railway Safety (CMRS), along-with all supporting officers and staffs for carrying out the functions of Commission of Metro Railway Safety as envisaged in the "Metro Railways (Operations and Maintenance) Act, 2002", in the Commission of Railway Safety under the Ministry of Civil Aviation.

Creation of these posts will ensure focused attention on the passenger safety and metro rail operation related issues, in respect of existing, as well as upcoming various metro rail projects.

#### Implementation strategy and targets:

The post of Commissioner of Metro Railway Safety shall be filled from the cadre of Indian Railway Engineering Services (IRSE, IRSEE, IRSSE, RSME) & IRTS by the Ministry of Civil Aviation through nomination from willing officers from Ministry of Railways in consultation with UPSC, initially according to Recruitment Rules for Commissioner of Railway Safety in the Commission of Railway Safety. The process to fill up the posts shall be initiated within two months.

#### About the Commission of Railway Safety:

- **What is it?** The Commission of Railway Safety working under the administrative control of the Ministry of Civil Aviation (Govt. of India), deals with the matters pertaining to safety of rail travel and train operation and is charged with certain statutory functions laid down in the Railway Act'1989.
- **Functions:** Functions performed by the organization are inspectorial, investigatory and advisory in nature. The Commission functions according to certain rules framed under the railways Act and executive instructions issued from time to time. The most important duty of the Commission is to ensure that any new railway line to be opened for passenger traffic should conform to the standard and specifications prescribed by the Ministry of Railways and the new line is safe in all respects for carrying the passenger traffic. This is also applicable to other works such as gauge conversion, doubling of lines and electrification of existing lines etc. The Commission also conducts statutory inquiries into serious train accidents and makes recommendations for improving safety on the railways in India.

- **CMRS:** The CMRS will be administratively under the control of Chief Commissioner of Railway Safety under Ministry of Civil Aviation. With a view to accord priority to passenger safety and also to ensure uniformity in safety certification, the Ministry of Housing and Urban Affairs while enacting the “Metro railways (Operations and Maintenance) Act, 2002”, has assigned similar functions to Commissioner of Metro Railway safety (CMRS) in respect of Metro Railways.

Sources: pib.

## India's first National Rail and Transportation University at Vadodara

**Context:** The Union Cabinet has approved the Ministry of Railways' transformative initiative to set up the first ever National Rail and Transport University (NRTU) in Vadodara to skill its human resources and build capability. This innovative idea will be a catalyst for transformation of rail and transport sector towards New India.

### Key facts:

- The University will be set up as a Deemed to Be University under de novo category as per the UGC [Institutions Deemed to be Universities] Regulations, 2016.
- A not-for-profit Company under Section 8 of the Companies Act, 2013 will be created by the Ministry of Railways which shall be the Managing Company of the proposed university.
- The company will provide financial and infrastructural support to the university, and appoint Chancellor and Pro-Chancellor of the university.
- Board of Management, comprising professionals and academics, shall be independent of the Managing Company with full autonomy to perform its academic and administrative responsibilities.
- The funding of the new University/Institute is to entirely come from Ministry of Railways.

### Significance of this move:

The university plans to use latest pedagogy and technology applications (satellite based tracking, Radio Frequency Identification and Artificial Intelligence) to improve on-the-job performance and productivity. Close collaboration with the Indian Railways will ensure that the stakeholders have access to Railways' facilities, which will work as 'live labs' and they will be able to work on solving real life problems. It will have 'Centres of Excellence' showcasing high-end, niche technology like High Speed Train.

Sources: pib.

## National Highways Investment Promotion Cell (NHIPC)

### Context:

The National Highways Authority of India has created a National Highways Investment Promotion Cell (NHIPC) for attracting domestic and foreign investment for highways projects.

### About NHIPC:

The cell will focus on engaging with global institution investors, construction companies, developers and fund managers for building investor participation in road infrastructure projects.

The NHIPC will be working in close co-ordination with various connected Ministries and Departments of Government of India, State Governments, Apex Business Chambers like CII, FICCI, ASSOCHAM, and InvestIndia etc. NHIPC will also work in close co-ordination with Foreign Embassies and Missions in India and Indian Embassies and Missions situated in foreign countries.

### Background:

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/- crores under 'Bharatmala Pariyojana'. Given the scale of investment required, both foreign and domestic investment from public and private sector is pivotal.

**About NHAI:**

The National Highways Authority of India was constituted by an act of Parliament, the National Highways Authority of India Act, 1988. It is responsible for the development, maintenance and management of National Highways entrusted to it and for matters connected or incidental thereto. The Authority was operationalised in Feb, 1995.

Sources: pib.

## National Company Law Tribunal (NCLT)

**Context:** Since the National Company Law Tribunal (NCLT) was set up 18 months ago, over 4,300 cases have been filed at its various benches for resolution process, according to the Reserve Bank data. Of these, more than 500 applications seeking admission for insolvency proceedings were rejected, dismissed or withdrawn.

**About National Company Law Tribunal:**

**What is it?** National Company Law Tribunal (NCLT) is a quasi-judicial body that will govern the companies in India. It was established under the Companies Act, 2013 and is a successor body of the Company Law Board.

**Powers:** NCLT will have the same powers as assigned to the erstwhile Company Law Board (which are mostly related to dealing with oppression and mismanagement), Board for Industrial and Financial Reconstruction (BIFR)(revival of sick companies) and powers related to winding up of companies (which was available only with the High Courts).

**Background:** The setting up of NCLT as a specialized institution for corporate justice is based on the recommendations of the Justice Eradi Committee on Law Relating to Insolvency and Winding up of Companies.

Sources: the hindu.

## Serious Fraud Investigation Office (SFIO)

**Context:** To detect financial frauds, the SFIO is in the process of developing an early warning system (EWS), and a consulting agency has been engaged to prepare the conceptual framework. In this regard, services of a consulting agency have been engaged to develop the conceptual framework.

**About SFIO:**

**What is it?** The Serious Fraud Investigation Office (SFIO) is a fraud investigating agency. It is under the jurisdiction of the Ministry of Corporate Affairs, Government of India. The SFIO is involved in major fraud probes and is the co-ordinating agency with the Income Tax and CBI.

**Composition:** It is a multi-disciplinary organization having experts from financial sector, capital market, accountancy, forensic audit, taxation, law, information technology, company law, customs and investigation. These experts have been taken from various organizations like banks, Securities and Exchange Board of India, Comptroller and Auditor General and concerned organizations and departments of the Government.

**Background:** The Government approved setting up of this organization on 9 January 2003 on the basis of the recommendations made by the Naresh Chandra Committee which was set up by the Government on 21 August 2002 on corporate governance.

Sources: the hindu.

## FSDC

**Context:** Finance Minister Arun Jaitley will chair pre-Budget consultation meeting with financial sector regulators and take stock of the economic situation. Fiscal position, external sector environment, financial sector reforms, rising non-performing assets and regulatory issues are likely to figure in the meeting. Apart from offering proposals for the Union Budget 2018 -19, the FSDC would also review the measures taken by the government and the RBI for dealing with the stressed assets and initiation of insolvency action against defaulting promoters.

FSDC

वित्तीय स्थिरता विकास परिषद्

Financial Stability and  
Development Council

**About FSDC:**

The Financial Stability and Development Council (FSDC) was constituted in December, 2010. The Council is chaired by the Union Finance Minister and its members are Governor, Reserve Bank of India; Finance Secretary and/or Secretary, Department of Economic Affairs; Secretary, Department of Financial Services; Chief Economic Adviser, Ministry of Finance; Chairman, Securities and Exchange Board of India; Chairman, Insurance Regulatory and Development Authority and Chairman, Pension Fund Regulatory and Development Authority.

**What it does?**

The Council deals, inter-alia, with issues relating to financial stability, financial sector development, inter-regulatory coordination, financial literacy, financial inclusion and macro prudential supervision of the economy including the functioning of large financial conglomerates. No funds are separately allocated to the Council for undertaking its activities.

Sources: the hindu.

**Paper 2 Topic:** Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections.

## National Nutrition Mission

**Context:** The cabinet has approved the setting up of a National Nutrition Mission (NNM) with a three-year budget of Rs 9,046.17 crore, to rein in malnourishment and stunted growth.

**Key facts:**

- NNM will address three aspects—the food that should be given to rein in stunting, undernourishment, low birthweight and anaemia; the delivery system required for it; and monitoring of the entire process.
- Under the mission, the government is targeting a reduction of 2% a year in stunting, undernutrition and low birthweight among 100 million people. Also, it aims to reduce anaemia among young children, women and adolescent girls by 3% a year.
- The mission would include several components like an ICT (information and communications technology)-based real-time monitoring system, incentivizing of states and Union territories to meet their targets, social audits, and setting up of nutrition resource centres.

### National Nutrition Mission

- Build on initiatives of States, encourage local innovations
- Involve panchayats & communities, reward & recognise malnutrition free panchayats
- Life Cycle approach; focus on pregnant & lactating mothers, children under 3 years and adolescent girls
- Converge district implementation plans from 2015 – Health, ICDS, Swachh Bharat, Matritva Sahyog Yojana, Scheme for Adolescent Girls
- Begin implementation with joint village contact programme
- Address under-nutrition through multi-sectoral approach
- Integrate nutrition in health monitoring & tracking systems

**Implementation:**

Under NNM, the ministries of women and child development, health and family welfare, and water and sanitation will work together. The mission will form an apex body that would fix targets and monitor, supervise and guide nutrition-related interventions across the ministries.

- The implementation strategy for NNM would be based on intense monitoring and a convergence action plan up to the grass-roots level. The programme would be undertaken in a phased manner, covering 315 districts in 2017-18, 235 districts in 2018-19 and the remaining districts in 2019-20.
- NNM would be implemented using information technology as the basic tool; workers at anganwadis (women and child development centres) would be given smartphones and their supervisors smart tablets to monitor daily

activities and compile reports. The move will be a deviation from the old practice of maintaining registers and will also help to reduce pilferage.

#### Way ahead:

It is very important to invest in nutrition in India because balanced diet and healthy nutrition plays a pivotal role in overall development of women and children. Healthy women deliver healthy children and nurture a good society, and healthy and nourished children are the country's future. Therefore, to tackle undernutrition problem in the country, various ministries need to work in convergence and not silos and NNM will be a platform to do so. NNM will ensure convergence, and lead to better results.

Sources: pib.

## Transgender Persons Bill, 2016

**Context:** The contentious Transgender Persons (Protection of Rights) Bill, 2016 is set to be re-introduced in the winter session of Parliament without any change in the draft provisions. However, India's transgender community — which numbers 4.8 million according to data from the latest round of the census — is opposing this move, since they believe the legislation meant to safeguard their interests only serves to undermine their right to life and livelihood.

#### Background:

In February 2014, the Supreme Court passed a landmark judgement, paving the way for enshrining the rights of transgenders in law. The apex court deemed that individuals had the right to the self-identification of their sexual orientation. It ruled that the fundamental rights granted by the Constitution are equally applicable to transgenders who constitute the 'third gender'. The judgement also called for affirmative action in education, primary health care, and that transgenders be identified as beneficiaries of social welfare schemes.

## The Transgender Persons (Protection of Rights) Bill, 2016

- The Bill defines a transgender person as one who is partly female or male; or a combination of female and male; or neither female nor male. In addition, the person's gender must not match the gender assigned at birth, and includes trans-men, trans-women, persons with intersex variations and gender-queers.
- The Bill prohibits discrimination against a transgender person in areas such as education, employment, and healthcare. It directs the central and state governments to provide welfare schemes in these areas.
- Offences like compelling a transgender person to beg, denial of access to a public place, physical and sexual abuse, etc. would attract up to two years' imprisonment and a fine.



Source: PRS India. Image credit: Wikipedia Commons

#### Why is the transgender community upset?

- The final version of the legislation identifies transgenders as being "partly female or male; or a combination of female and male; or neither female nor male". This definition which draws a clinical caricature is a departure from the intention of the original Bill to cleanse society of the stigma it placed on transgenders.
- Moreover, to be recognised as transgenders, individuals have to submit themselves to a medical examination by a District Screening Committee comprising of a Chief Medical Officer, a psychiatrist, a social worker, and a member of the transgender community. This is in stark contrast to the 2014 Bill which gives individuals the right to self-identify their sex.
- The anti-discriminatory clauses of the Bill are extended to education, health care and social security. The provision of earmarking jobs for transgenders, a central plank of the 2014 Bill, has been lost in translation, with the diluted

new draft ditching reservations and espousing equal opportunity in all spheres of life, as a panacea to create equity among the sexes.

- Grievance redressal has been internalised, with establishments consisting of hundred or more persons mandated to designate a complaint officer to deal with any violation of the Act. This is in lieu of the setting up of central and State transgender rights courts.

#### **What did the standing committee recommend?**

The bill was referred to a standing committee. In its report on the 2016 draft Bill, the committee draws attention to the inadequate definition of the third gender, which is founded on a heterosexual worldview. It also advocates extending civil rights enjoyed by the citizenry, such as marriage, divorce, and adoption, to encompass the third gender.

Other recommendations include the rescue, protection, and rehabilitation of transgenders. Educational institutions have been directed to adopt an inclusive approach that is gender-neutral.

Sources: the hindu.

## International Day of Persons with Disabilities

**Context:** International day of persons with disabilities was observed on December 3 to promote the rights and welfare of disabled individuals around the globe.

**2017 Theme:** "Transformation towards sustainable and resilient society for all".

#### **Background:**

The annual observance of the International Day of Persons with Disabilities was proclaimed by the United Nations General Assembly resolution 47/3 in 1992. It aims to promote the rights and well-being of persons with disabilities in all spheres of society and development, and to increase awareness of on the situation of persons with disabilities in every aspect of political, social, economic and cultural life.

#### **Facts about disability:**

- At least 10% of the world's population, or 650 million people, live with a disability.
- 20% of the world's poor are disabled.
- The percentage of children with disabilities not attending school is extremely variable and is between 65 – 85% in some African countries.
- Mortality for children with disabilities may be as high as 80% in countries where under-five mortality as a whole has decreased to below 20%.
- In many low-income and middle -income countries, only 5-15% of disabled people who require assistive devices and technology have access to them.

#### **Various efforts in this regard:**

- Building on many decades of UN's work in the field of disability, the Convention on the Rights of Persons with Disabilities, adopted in 2006, has further advanced the rights and well-being of persons with disabilities in the implementation of the 2030 Agenda for Sustainable Development and other international development frameworks, such as the Sendai Framework for Disaster Risk Reduction, the Charter on Inclusion of Persons with Disabilities in Humanitarian Action, the New Urban Agenda, and the Addis Ababa Action Agenda on Financing for Development.



- People with disabilities are arguably the largest 'invisible minority' on the planet. WHO figures say that 15.3% of the world's population lives with some kind of disability. But India's 2011 census says that only 2.21% of the population have disabilities.

Sources: the hindu.

## Courts can turn down child repatriation, says Supreme Court

A recent Supreme Court judgment has accorded courts in India unlimited discretion to determine which parent should have the custody of minor children involved in international parental child abduction. The verdict holds that Indian courts can decline the relief of repatriation of a child to the parent living abroad even if a foreign court, located in the country from where the child was removed, has already passed orders for the child's repatriation.

The judgment observed that welfare of the child came first over the repatriation order of the foreign court as India was not a signatory to the Hague Convention of "The Civil Aspects of International Child Abduction".

### **Background:**

The judgment came in a case where the father took the younger of the two sons from his wife's custody in the United States and came to India. The mother's version was that he had taken the boy on the pretext of visiting the neighbourhood mall. A U.S. Court upheld her lawful custody and ordered the man to return his son to his wife.

### **What is Inter-country parental child abduction?**

Inter-country parental child abduction is a situation that is attained when one parent takes a child or children to a foreign country to prevent the other parent from seeking custody of the child.

### **Indian scenario:**

India's case-load (regarding IPCA) is second largest in the United States which is followed by Mexico. At least 90 children from 80 Indian-American families were affected by separating parents and the legal problems involved. As more and more Indians are studying and working in the U.S, such cases are growing in number and it is necessary to get a better mechanism to deal with this.

### **About Hague Abduction Convention:**

The Hague Convention on the Civil Aspects of International Child Abduction or Hague Abduction Convention is a multilateral treaty developed by the Hague Conference on Private International Law (HCCH) that provides an expeditious method to return a child internationally abducted by a parent from one member country to another. The Convention entered into force between the signatories on 1 December 1983.

- The Convention was drafted to ensure the prompt return of children who have been abducted from their country of habitual residence or wrongfully retained in a contracting state not their country of habitual residence.
- The primary intention of the Convention is to preserve whatever status quo child custody arrangement existed immediately before an alleged wrongful removal or retention thereby deterring a parent from crossing international boundaries in search of a more sympathetic court.
- The Convention applies only to children under the age of 16.

Sources: the hindu.

## Universal social security payments

### **Context:**

Labour ministry's proposal for universal social security payments is facing resistance from other government sections because such a programme would raise overall wage costs.

### **What's the concern?**

- Central ministries and the states have increasingly been hiring contract workers to save on costs as minimum wages are not mandatory in such cases. However, a social security programme would require the employers of contract workers to help pay for it.
- India's total workforce stands at 450 million, out of which a little over 10% is in the organised sector, enjoying social security of some sort.

**Contract workers in the country:**

- The government appoints contract workers in three categories. First, for work of a routine nature such as housekeeping, maintenance and data entry that's bundled and entrusted to staffing agencies. Second, contractual appointments for select posts, particularly those that need high professional skills. The third category comprises retired government employees whose skills and expertise acquired during their tenure in government are found useful.
- According to Seventh Pay Commission data, the union government is one of the biggest users of temporary staff or contract employees, including scheme workers, and spends around Rs 300 crore a year on their wages. The scheme workers refer to the six million who are employed in flagship social sector programmes.

**'Draft code on Social Security and Welfare':**

The Centre, in March 2017, proposed a labour code on social security which will provide social security cover to the entire workforce in the country, including self-employed and agricultural workers.

- According to the code, even households employing domestic help will also have contribute towards schemes including provident fund and gratuity for the worker. Factories employing even a single worker will have to contribute towards social security benefits, as per the proposal.
- Every working person in the country will be covered under the social security code whether she belongs to the organised sector or the unorganised sector. For the first time, cover to agricultural workers is being provided along with self-employed people. The target is to provide social security benefits to 45 crore workers.
- The proposed code seeks to cover "any factory, any mine, any plantation, any shop, charitable organisations" and all establishments or households employing casual, part-time, fixed-term, informal, apprentice, domestic and home-based workers. All such establishments or factories will be liable to pay compensation if they fail to contribute towards the social security schemes of the workers.
- The total contribution to be made by employers towards Employees' Provident Fund and Employees' State Insurance Scheme is proposed to be capped at 30% of the workers' income. At present, employers contribute 31.5% of the workers' income towards these schemes.
- According to the proposed code, self-employed workers will contribute 20% of their monthly income towards provident fund, pension and other related schemes. Self-employed workers will also include "a person who takes land on share cropping or any other form of rent, and tills the same using his own or family members' labour."
- All the entities – whether factories or households – will have to register their workers through an Aadhaar-based registration system, according to another proposal, and self-employer workers will be required to register themselves.
- A National Social Security Council, chaired by the Prime Minister, has been proposed to streamline and make policy on social security schemes related to all the Ministries. Other members would include: Finance Minister, Labour Minister, Health and Family Welfare Minister along with employer and employees' representatives.

Sources: ET.

## Juvenile Justice (JJ) Act, 2015

**Context:** In an effort to tackle the delay in issuing adoption orders by courts, which are supposed to dispose such cases within two months from the date of filing, the Ministry of Women and Child Development is planning to amend the Juvenile Justice (JJ) Act, 2015.

**The proposal:**

Empower the executive magistrate, instead of the court, to issue orders under the adoption proceedings. Presently, according to the JJ Act, once an adoption order is issued by a court, the child becomes the son/daughter of the adoptive parents for all purposes from the date on which the adoption order takes effect. Further, all ties of the child and his or her biological family stand severed and are replaced by those created by the adoption order.

**Need for an amendment:**

Though Section 61 (2) of the JJ Act states that the 'adoption proceedings shall be held in camera and the case shall be disposed of by the court within a period of two months from the date of filing', a number of adoption proceedings are getting delayed, some even pending for more than two years.

**Concerns:**

While the intent is good, the execution of this order may not be in the best interest of the child. It is because a district magistrate is already overburdened with several responsibilities and may not be in a position to look at this in detail. Besides, s/he may not have the legal acumen for carrying out these proceedings.

**About the Juveniles Justice Act, 2015:**

The Juvenile Justice (Care and Protection of Children) Act, 2015 came into force in January, 2016. The new Act repeals the Juvenile Justice (Care and Protection of Children) Act, 2000. The JJ Act, 2015 provides for strengthened provisions for both children in need of care and protection and children in conflict with law.

**Key provisions:**

- The Act clearly defines and classifies offences as petty, serious and heinous, and defines differentiated processes for each category. Keeping in view the increasing number of serious offences being committed by persons in the age group of 16-18 years and recognizing the rights of the victims as being equally important as the rights of juveniles, special provisions are incorporated in the Act to tackle heinous offences committed by individuals in this age group.
- It establishes a statutory status for the Child Adoption Resources Authority (CARA). It also proposes several rehabilitation and social integration measures for institutional and non-institutional children. It provides for sponsorship and foster care as completely new measures.
- Mandatory registration of all institutions engaged in providing child care is required according to the Act. New offences including illegal adoption, corporal punishment in child care institutions, the use of children by militant groups, and offences against disabled children are also incorporated in the legislation.
- The new law gives the Juvenile Justice Board the power to assess whether the perpetrator of a heinous crime aged between 16 and 18, had acted as a 'child' or as an 'adult.' The board will be assisted in this process by psychologists and social experts.
- It strikes a fine balance between the demands of the stakeholders asking for continued protection of rights of juveniles and the popular demand of citizens in the light of increasing incidence of heinous crimes by young boys.

Sources: the hindu.

## The Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill 2017

**Context:** The Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill 2017, initiated by the women & child development ministry, is currently with a group of ministers (GoM) that will take a final view on the matter. The Bill has proposed severe punishment for those engaging in the heinous crime.

**Highlights of the Bill:**

**Forms of trafficking:** The Bill identifies various forms of trafficking, including for the purposes of bonded labour, sexual exploitation, pornography, removal of organs and begging. Listing out the 'aggravated forms of trafficking', the bill also speaks of offences such as intimidation, inducement, promise of payment of money, deception or coercion. It mentions trafficking after administering any drug or alcohol or for the purpose of marriage or under the pretext of marriage.

**Punishment:** Whoever commits the offence of aggravated form of trafficking of a person shall be punished with rigorous imprisonment for a term which shall not be less than 10 years, but which may extend to life imprisonment and shall be liable to fine that shall not be less than Rs 1 lakh. For repeat offenders, it suggests imprisonment for life "which shall mean imprisonment for the remainder of that person's natural life", apart from a fine that will not be less than Rs 2 lakh.

**Anti- trafficking bureau:** The bill proposes the establishment of a national anti-trafficking bureau, which shall be entrusted with the gamut of issues aimed at controlling and tackling the menace under various forms.

**Functions of the Bureau:** Functions include coordination, monitoring and surveillance of illegal movement of persons and prevention. The bureau will also be entrusted with increasing cooperation with authorities in foreign countries for boosting operational and long-term intelligence for investigation of trafficking cases, and driving in mutual legal assistance.

**State level measures:** The bill also aims at having state-level anti-trafficking officers who shall also provide relief and rehabilitation services through district units and other civil-society organisations.

**Relief and rehabilitation:** The bill also spells out measures towards relief and rehabilitation for the victims of trafficking, and seeks the formation of a committee for this purpose. The committee is proposed to be headed by the women & child development secretary and would have members from the ministries of home; external affairs; labour and employment; social justice and empowerment; panchayati raj; and health and family welfare.

**Background:**

As per data released by the National Crime Records Bureau (NCRB), human trafficking numbers rose by almost 20% in 2016 against the previous year. NCRB said there were 8,132 human trafficking cases last year against 6,877 in 2015, with the highest number of cases reported in West Bengal (44% of cases), followed by Rajasthan (17%). Of the 15,379 victims who were caught in trafficking, 10,150 were female and 5,229 males.

The purpose of trafficking included forced labour; sexual exploitation for prostitution; other forms of sexual exploitation; domestic servitude; forced marriage; child pornography; begging; drug peddling; and removal of organs.

Sources: the hindu.

*Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

## Sustainable Action for Transforming Human capital

**Context:** NITI Aayog's prescription for the State — to bring private sector players in a big way into the functioning of public hospitals in districts — has been met with strong opposition in Karnataka. Karnataka, which has been selected for the SATH (Sustainable Action for Transforming Human capital) programme in the health sector, has opposed the aayog's proposal to privatise well-functioning district hospitals in Tier 2 and Tier 3 cities for treatment of non-communicable diseases (NCDs).

The state has sternly opposed any terms and conditions for entering into an agreement with McKinsey & Company, consultants for implementation of the model. It is of the view that the proposal will have adverse implications for the public healthcare system of the State.

**Background:**

The SATH program embodies the philosophy of co-operative federalism. NITI Aayog selected the three states through a three stage challenge-process – expression of interest, presentations by the states and assessment of commitment to health sector reforms. Finally, three states: Assam, Uttar Pradesh and Karnataka were chosen based on objective assessment criteria affecting the potential for impact and likelihood of success. A consortium of reputed technical consultants are closely working with NITI Aayog and the states to conceptualize the initiatives and provide support in the implementation process.

### Sustainable Action for Transforming Human Capital (SATH)



Program launched for health and education sectors transformation

**About SATH programme:**

Furthering the agenda for cooperative federalism, NITI Aayog has launched SATH, a program providing 'Sustainable Action for Transforming Human capital' with the State Governments. The vision of the program is to initiate transformation in the education and health sectors. The program addresses the need expressed by many states for technical support from NITI.

**SATH aims** to identify and build three future 'role model' states for health systems.

**NITI will work in close collaboration** with their state machinery to design a robust roadmap of intervention, develop a program governance structure, set up monitoring and tracking mechanisms, hand-hold state institutions through the execution stage and provide support on a range of institutional measures to achieve the end objectives.

**The program will be implemented** by NITI along with McKinsey & Company and IPE Global consortium, who were selected through a competitive bidding process.

Sources: the hindu.

## Financial Resolution and Deposit Insurance Bill 2017

### Context:

The Financial Resolution and Deposit Insurance Bill, 2017 (FRDI Bill), was introduced in the Lok Sabha on August 11, 2017. The bill is presently under consideration of the Joint Committee of Parliament. The Joint Committee is consulting all the stakeholders on the provisions of the FRDI Bill. The committee is now set to invite the RBI governor Urjit Patel to brief the members. It is noteworthy that the bill was opposed by the bank unions who have also requested the Finance Minister Arun Jaitley to withdraw this legislation.

- The Financial Resolution and Deposit Insurance Bill, 2017, covers bankruptcy of businesses such as banks

- The Bill introduces the provision for a 'bail-in', whose purpose is to provide capital to absorb the losses of a bank to ensure its survival

- Here, survival does not mean safety of depositors' money, but restoration of capital of the bank
- The 'bail-in' empowers the proposed Resolution Corporation to suspend a liability owed by the bank (money in a savings or FD account)

- With a 'bail-in', the bank can simply refuse repayment of a customer's money and instead, issues securities such as preference shares

### About the FRDI Bill:

The Bill would provide for a comprehensive resolution framework for specified financial sector entities to deal with bankruptcy situation in banks, insurance companies and financial sector entities.

- The Bill when enacted, will pave the way for setting up of the Resolution Corporation. It will also result in the repealing of the Deposit Insurance and Credit Guarantee Corporation Act, 1961 to transfer the deposit insurance powers and responsibilities to the Resolution Corporation.
- The Resolution Corporation would protect the stability and resilience of the financial system; protecting the consumers of covered obligations up to a reasonable limit; and protecting public funds, to the extent possible.
- It would lead to repeal or amendment of resolution-related provisions in sectoral Acts as listed in Schedules of the Bill. The proposed Bill complements the Code by providing a resolution framework for the financial sector.

### Merits of Financial Resolution and Deposit Insurance Bill, 2017:

- The Financial Resolution and Deposit Insurance Bill, 2017 seeks to give comfort to the consumers of financial service providers in financial distress. It also aims to inculcate discipline among financial service providers in the event of financial crises by limiting the use of public money to bail out distressed entities.
- It would help in maintaining financial stability in the economy by ensuring adequate preventive measures, while at the same time providing the necessary instruments for dealing with an event of crisis.
- The Bill aims to strengthen and streamline the current framework of deposit insurance for the benefit of a large number of retail depositors.
- The Bill seeks to decrease the time and costs involved in resolving distressed financial entities.

Sources: the hindu.

## FAME India scheme

### Context:

Original equipment manufacturers will have to seek approval from the Department of Heavy Industry before accepting any proposal to supply electric buses for availing incentives under the FAME India scheme. The move is aimed at facilitating the smooth roll out and management of demand incentives for electric buses under the scheme.

### About FAME India scheme:

**What is it?** With an aim to promote eco-friendly vehicles, the government had launched the Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME-India) scheme in 2015.

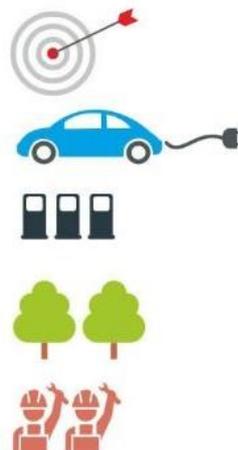
**The FAME India Scheme is aimed** at incentivising all vehicle segments, including two-wheelers, three wheeler auto, passenger four-wheeler vehicle, light commercial vehicles and buses. The scheme covers hybrid and electric technologies like a strong hybrid, plug-in hybrid and battery electric vehicles.

# WHAT IS FAME?

Faster Adoption and Manufacturing of Electric (Hybrid) Vehicles in India is a scheme under **National Electric Mobility Mission Plan (NEMMP)**

## Target of NEMMP - 2020

- **6-7 million** Hybrid & Electric Vehicle sale by 2020
- **9500 million** litres of estimated cumulative fuel saving
- **2 million** tonnes reduction in pollution & green house gas emissions
- **65,000** Direct & **3,00,000** Indirect jobs



**Facts:** FAME India – Faster Adoption and Manufacturing of Hybrid and Electric vehicles in India – is a part of the National Electric Mobility Mission Plan. The scheme envisages Rs 795 crore support in the first two fiscals starting with the current year. It is being administered by the Heavy Industries Ministry.

Sources: the hindu.

## Government to regulate ads on pre-natal sex

**Context:** Nine years after it took upon itself the task of regulating ads and content relating to sex-determination tests banned under local law, the Supreme Court has now washed its hands of the matter and left it to the government to take care of such issues in consultation with the search engines. The court cited lack of expertise as a reason for this.

### Background:

The case had begun in 2008, when an activist filed a public interest litigation (PIL) to get the search engines to abide by local law which bans such tests to arrest the falling sex ratio in the country. The government had then set up a nodal body to act as the interface with the search engines on such complaints. The court had passed umpteen orders in which the court warned the engines that they should either follow local law or shut shop.

### Act Provides – Permits – after registration

#### Use & regulation of Diagnostic Techniques

- Genetic disorders
- Metabolic disorders
- Chromosomal malformation
- Congenital disorders
- Sex linked disorder

#### Prevention of Misuse

- Sex selection before conception
- Prenatal Sex Determination
- Female Feticide

### About PCPNDT Act:

The Pre-conception & Pre-natal Diagnostics Techniques (PC & PNDT) Act, 1994 was enacted in response to the decline in Sex ratio in India, which deteriorated from 972 in 1901 to 927 in 1991. The main purpose of enacting the act is to ban the use of sex selection techniques before or after conception and prevent the misuse of prenatal diagnostic technique for sex selective abortion.

- Offences under this act include conducting or helping in the conduct of prenatal diagnostic technique in the unregistered units, sex selection on a man or woman, conducting PND test for any purpose other than the one mentioned in the act, sale, distribution, supply, renting etc. of any ultra sound machine or any other equipment capable of detecting sex of the foetus.
- The act was amended in 2003 to improve the regulation of the technology used in sex selection. The Act was amended to bring the technique of pre conception sex selection and ultrasound technique within the ambit of the act.

- The amendment also empowered the central supervisory board and state level supervisory board was constituted. In 1988, the State of Maharashtra became the first in the country to ban pre-natal sex determination through enacting the Maharashtra Regulation of Pre-natal Diagnostic Techniques Act.

Sources: the hindu.

## SANKALP Project

**Context:** The government has signed a Financing Agreement for IBRD loan of USD 250 million (equivalent) for the “Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) Project” with the World Bank.

### About SANKALP scheme:

**What is it?** SANKALP is a Centrally sponsored scheme. It is an outcome focused scheme marking shift in government’s implementation strategy in vocational education and training from inputs to results. SANKALP will provide market relevant training to 3.5 crore youth.

**Objective:** The Objective of the project is to enhance institutional mechanisms for skills development and increase access to quality and market-relevant training for the work force.

**What it does?** The scheme provides the required impetus to the National Skill Development Mission, 2015 and its various sub missions. It is aligned to flagship Government of India programs such as Make in India and Swachhta Abhiyan and aims at developing globally competitive workforce for domestic and overseas requirements.

**The Key result areas** for the project include Institutional Strengthening at the National and State Levels for Planning, Delivering, and Monitoring High-Quality Market-Relevant Training; Improved Quality and Market Relevance of Skills Development Programs; Improved access to and completion of skills training for female trainees and other disadvantaged groups; and Expanding skills training through private-public partnerships (PPPs).

Sources: pib.

## National Ayush Mission (NAM)

**Context:** The Union Cabinet has approved the continuation of Centrally Sponsored Scheme of National Ayush Mission (NAM) from 01.04.2017 to 31.03.2020 with an outlay of Rs. 2400 crore over the 3 year period.

### National AYUSH mission:

National AYUSH mission was launched in September 2014 by the government of India.

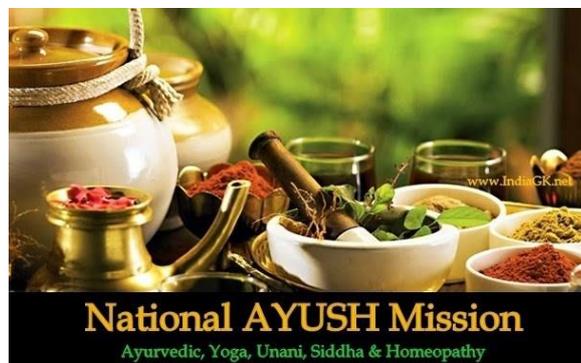
**Aim:** It is aimed at addressing the gaps in health services by supporting AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy) care and education, particularly in vulnerable and far-flung areas.

### Details:

- Under the mission, special focus will be given to specific needs of vulnerable areas and allocation of higher resources in their annual plans.
- The Mission will help in the improvement of AYUSH education through enhancement in the number of upgraded educational institutions.
- It will provide better access to AYUSH services through increase in number of AYUSH hospitals and dispensaries, availability of drugs and manpower.
- It provides sustained availability of quality raw material for AYUSH systems of medicine.
- It improves availability of quality Ayurvedic, Siddha, Unani and Homoeopathy drugs through increase in the number of pharmacies, drug laboratories and improved enforcement mechanism.

### Way ahead:

The National AYUSH Mission intends to build on India’s unmatched heritage represented by its ancient systems of medicine like Ayurveda, Sidhha, Unani & Homeopathy (ASU&H) which are a treasure house of knowledge for



preventive and promotive healthcare. The positive features of the Indian systems of medicine namely their diversity and flexibility; accessibility; affordability, a broad acceptance by a large section of the general public; comparatively lesser cost and growing economic value, have great potential to make them providers of healthcare that the large sections of our people need.

Sources: pib.

## North East Special Infrastructure Development Scheme (NESIDS)

The Union Cabinet has approved the introduction of new Central Sector Scheme of "North East Special Infrastructure Development Scheme" (NESIDS) from 2017-18 with 100% funding from the Central Government to fill up the gaps in creation of infrastructure in specified sectors till March, 2020.

The new scheme will broadly cover creation of infrastructure under following sectors:

- Physical infrastructure relating to water supply, power, connectivity and specially the projects promoting tourism;
- Infrastructure of social sectors of education and health.

### Benefits of NESIDS:

The assets to be created under the new scheme of NESIDS will not only strengthen health care and education facilities in the region but will also encourage tourism thereby the employment opportunities for local youth. The scheme will act as a catalyst in overall development of the region in the years to come.

Sources: pib.



## NLCPR

**Context:** The Union Cabinet has approved the continuation of the existing Non Lapsable Central Pool of Resources (NLCPR) scheme with funding pattern of 90:10 till March, 2020 with an outlay of Rs.5300.00 crore. It would enable completion of ongoing projects.

### About NLCPR:

The broad objective of the Non-lapsable Central Pool of Resources scheme is to ensure speedy development of infrastructure in the North Eastern Region by increasing the flow of budgetary financing for new infrastructure projects/schemes in the Region. Both physical and social infrastructure sectors such as Irrigation and Flood Control, Power, Roads and Bridges, Education, Health, Water Supply and Sanitation – are considered for providing support under the Central Pool, with projects in physical infrastructure sector receiving priority.

Funds from the Central Pool can be released for State sector as well as Central sector projects/schemes. However the funds available under the Central Pool are not meant to supplement the normal Plan programmes either of the State Governments or Union Ministries/ Departments/ Agencies.

Sources: pib.

## Indian Forest Act

**Context:** The Indian Forest (Amendment) Bill, 2017 has been tabled in the Lok Sabha. The Bill seeks to amend the Indian Forest Act to exempt felling and transportation of bamboo grown in non-forest areas from the state permit.

### Background:

Last month, the government had come out with an ordinance to amend the Indian Forest Act, 1927 in this regard. This bill would replace this ordinance. Prior to issuance of the ordinance, the definition of tree in the Act included palm, bamboo, brushwood and cane.



**Highlights of the Indian Forest (Amendment) Bill, 2017:**

- The bill seeks to exempt bamboo grown in non-forest areas from definition of tree, thereby dispensing with the requirement of felling/transit permit for its economic use. However, bamboo grown in the forest areas shall continue to be governed by the provisions of Indian Forest Act, 1927.
- A major objective of the amendment is to promote cultivation of bamboo in non-forest areas to achieve twin objectives of increasing the income of farmers and also increasing the green cover of the country.

**What necessitated this move?**

Bamboo, though, taxonomically a grass, was legally defined as a tree under the Indian Forest Act, 1927. Before this amendment, the felling and transit of bamboo grown on forest as well non-forest land attracted the provisions of the Indian Forest Act, 1927 (IFA, 1927). This was a major impediment for bamboo cultivation by farmers on non-forest land.

**Significance of this move:**

- The amendment and the resultant change in classification of bamboo grown in non-forest areas will usher in much needed and far-reaching reforms in the bamboo sector. While on the one hand, the legal and regulatory hardships being faced by farmers and private individuals will be removed and on the other hand, it will create a viable option for cultivation in 12.6 million hectares of cultivable waste land.
- The measure will go a long way in enhancing the agricultural income of farmers and tribals, especially in North-East and Central India. The amendment will encourage farmers and other individuals to take up plantation/ block plantation of suitable bamboo species on degraded land, in addition to plantation on agricultural land and other private lands under agroforestry mission.
- Some of the other benefits of amendment include enhancing supply of raw material to the traditional craftsmen of rural India, bamboo based/ paper & pulp industries, cottage industries, furniture making units, fabric making units, incense stick making units.
- Besides promoting major bamboo applications such as wood substitutes and composites like panels, flooring, furniture and bamboo blind, it will also help industries such as those dealing with food products (bamboo shoots), constructions and housing, bamboo charcoal etc.
- The amendment will greatly aid the success of recently constituted National Bamboo Mission and is in also line with the objective of doubling the income of farmers, besides conservation and sustainable development.

**Benefits of Bamboo:**

In generating employment: Bamboo grows abundantly in areas outside forests with an estimated growing stock of 10.20 million tonnes. About 20 million people are involved in bamboo related activities. One tonne of bamboo provides 350 man days of employment. An enabling environment for the cultivation of bamboo will help in creation of job opportunities in the country.

Ecological benefits: Bamboo has several ecological benefits such as soil-moisture conservation, landslide prevention and rehabilitation, conserving wildlife habitat, enhancing source of bio-mass, besides serving as a substitute for timber.

**Way ahead:**

As per the assessment of United Nation's Industrial Development Organisation (UNIDO), the bamboo business in the North-East Region alone has a potential of about Rs. 5000 crores in the next ten years. The amendment will therefore, help in harnessing this great potential and enhance the scope to increase the present level of market share and improve the economy of the entire country, particularly the North Eastern region.

Sources: pib.

## Payment of Gratuity (Amendment) Bill, 2017

**Context:** The Payment of Gratuity (Amendment) Bill, 2017, has been introduced in the Lok Sabha. The Bill will allow it to notify a higher period of maternity leave and raise gratuity limit for employees.

### **Highlights of the Payment of Gratuity (Amendment) Bill, 2017:**

According to the Statement of Objects and Reasons of the bill, the amendment would allow the central government to notify the maternity leave period for “female employees as deemed to be in continuous service in place of existing twelve weeks”.

It has also been proposed to empower the central government to notify the ceiling proposed, instead of amending the said Act, so that the limit can be revised from time to time keeping in view the increase in wage and inflation, and future Pay Commissions.

### **The Payment of Gratuity Act, 1972:**

The Payment of Gratuity Act, 1972 applies to establishments employing 10 or more persons. The main purpose for enacting this Act is to provide social security to workmen after retirement, whether retirement is a result of the rules of superannuation, or physical disablement or impairment of vital part of the body. Therefore, the Payment of Gratuity Act, 1972 is an important social security legislation to wage earning population in industries, factories and establishments.

Sources: the hindu.

## IIM Bill

**Context:** Parliament has unanimously passed the IIM Bill, 2017 that grants the Indian Institutes of Management the power to grant degrees instead of post-graduate diplomas.

### **Key features of the Bill:**

- IIMs would become institutes of national importance with power to grant degrees.
- The boards of the institutes are proposed to be vested with full autonomy including the power to appoint chairperson as well as the director.
- Power to review the performance of each IIM is also vested with the board.
- Board to be the principal executive body of each institute.
- Chairperson of the board will be appointed by the board for a period of four years.
- Director of each IIM will be appointed by the board for a period of five years via a search-cum-selection panel. Once the bill becomes an act, the board is not required to seek the human resource development ministry's approval for this.
- The Board will have the power to remove a director.
- The IIMs' accounts will be audited by the Comptroller and Auditor General of India.
- There will be an IIM Coordination Forum to be notified by the central government. It shall function as an advisory body and will be headed by an eminent person.
- The bill says the central government may frame rules to give additional powers and duties to the IIM Boards and, it will decide the terms and condition of service of directors although the appointment will be made by the board. It will notify the IIM coordination forum to be headed by a eminent person.
- All rules and regulations framed either by the central government or the IIM Boards will need to be tabled in parliament.

Sources: the hindu.

## Central Road Fund (Amendment) Bill, 2017

The Lok Sabha has passed the Central Road Fund (Amendment) Bill, 2017. The Bill seeks to amend the Central Road Fund Act, 2000, through which the cess levied and collected on high speed petrol and diesel is distributed for development of rural roads, national highways, railways, state roads and border area roads.

### Highlights of the Bill:

**Inclusion of inland waterways:** The Bill defines national waterways as those that have been declared as 'national waterways' under the National Waterways Act, 2016. Currently, 111 waterways are specified under the 2016 Act.

**Utilisation of fund:** Under the 2000 Act, the fund can be utilised for various road projects including: (i) national highways, (ii) state roads including roads of inter-state and economic importance, and (iii) rural roads. The Bill provides that in addition to these the fund will also be used for the development and maintenance of national waterways.

**Powers of central government:** Under the Act, the central government has the power to administer the fund. The central government will make decisions on the: (i) investments on national highways and expressways projects, (ii) raising funds for the development and maintenance of national highways, and rural roads, and (iii) disbursement of funds for national highways, state roads and rural roads. The Bill provides that central government will make all the above decisions for national waterways as well.

**Allocation of cess:** Under the Act, the cess on high speed diesel oil and petrol is allocated towards different types of roads. The Bill seeks to decrease the allocation of cess towards the development and maintenance of national highways from 41.5% to 39%. It allocates 2.5% of the cess towards the development and maintenance of national waterways.

### About Central Road Fund:

The Central Road Fund was established by the government as per the Central road fund act 2000 to fund the development and maintenance of National Highways, State Highways and Rural roads.

In order to mobilise the fund, the Central Road Fund Act 2000 proposed to levy and collect by way of cess, a duty of excise and duty of customs on petrol and high speed diesel oil. The fund is utilised for the development and maintenance of National highways, State roads, Rural roads and for provision of road overbridges/under bridges and other safety features at unmanned Railway Crossings.

Sources: pib.

## Immovable Property (Amendment) Bill

**Context:** Lok Sabha has passed the Immovable Property (Amendment) Bill. The Bill amends the regulations governing compensation payable for acquisition of immovable property by the Centre for defence and security purposes.

### Highlights of the Bill:

- The Requisitioning and Acquisition of Immovable Property (Amendment) Bill 2017 amends the original 1952 Act to allow the Centre to reissue the acquisition notice in case the property's owner wants to be given a hearing.
- As per the amendment, the compensation rates that will be payable will be fixed at the date of publication of the first notice in addition to an interest.
- The amended bill provides that the government need not pay compensation at the current market rate as is applicable on the date of issuing the fresh notice.
- The amended bill is aimed at addressing cases where the property owner is able, after prolonged litigation, to get the acquisition notice quashed in the court so as to be given a hearing.

### Background:

The Requisitioning and Acquisition of Immovable Property Act empowers the central government to requisition any immovable property and also to acquire them under certain specified conditions. The Act came into force in March 1952.

Sources: the hindu.

## Triple Talaq bill

**Context:** The government has introduced in the Lok Sabha the much talked-about Muslim Women (Protection of Rights on Marriage) Bill, which seeks to criminalise the practice of instant triple talaq (or ‘talaq-e-biddat’).

### Highlights of the Muslim Women (Protection of Rights on Marriage) Bill:

- The Bill seeks to prohibit “any pronouncement (of divorce) by a person upon his wife by words, either spoken or written or in electronic form, or in any other manner”.
- The proposed law seeks to make triple talaq a punishable offence and describes the practice as against “constitutional morality” and “gender equity”. Anyone who pronounces instant divorce “shall be punished with imprisonment for a term which may extend to three years and a fine”, the bill proposes.
- As per the provisions of the Bill, the husband could also be fined and the quantum of fine would be decided by the magistrate hearing the case.
- The proposed law will be applicable only to instant triple talaq and will empower the victim to approach a magistrate seeking “subsistence allowance” for herself and minor children. The woman can also seek the custody of her minor children from the magistrate who will take a final call on the issue.

### Background:

The Supreme Court had termed the practice of instant triple talaq unconstitutional while considering a petition to that effect. The then CJI J S Khehar had directed the government to bring in a legislation in this regard.

### Opposition:

Several Muslim clerics and Muslim organisations have opposed the Bill, terming the government’s stand as “uncalled for interference” in the personal laws of the community. The All India Muslim Personal Law Board (AIMPLB) opposed the legislation holding it against the Sharia law and may potentially destroy families if made into a law.

Sources: the hindu.

## The Indian Institute of Petroleum and Energy Bill, 2017

The Parliament has passed the Indian Institute of Petroleum and Energy Bill, 2017.

### Highlights of the Bill:

**Institution of national importance:** The Bill establishes the Indian Institute of Petroleum and Energy, Vishakhapatnam, Andhra Pradesh. It declares the Institute as an institution of national importance. The Institute aims to provide high quality education and research focussing on the themes of petroleum, hydrocarbons and energy.

**Authorities of the Institute:** The key authorities of the Institute are as follows: (i) the General Council; (ii) the Board of Governors; (iii) the Senate; and (iv) any other authorities declared by the statutes.

**Composition and powers of the Board of Governors:** The Board of Governors will comprise 13 members including: (i) the President (to be appointed by the central government); (ii) the Director of the Institute; (iii) two persons from the Board of Directors of companies that contribute to the Institute’s endowment fund (to be nominated by the central government); (iv) five eminent experts in the field of petroleum technology and energy; and (v) two professors of the Institute.

**Powers of the Board of Governors include:** (i) instituting courses of study and laying down standards of proficiency and other academic distinctions; (ii) considering proposals for taking loans for the Institute; (iii) creating academic, administrative, technical and other posts; and (iv) fixing fees and other charges.

**Composition and powers of the General Council:** The Council will comprise up to 20 members including the: (i) Secretary, Ministry of Petroleum and Natural Gas (Chairman); (ii) Chairman, Indian Oil Corporation Limited; (iii) Secretary, Oil Industry Development Board; and (iv) Principal Advisor (Energy), NITI Aayog.

**The powers of the Council include:** (i) reviewing the broad policies and programmes of the Institute; (ii) advising the Board with respect to new technologies in the domain of energy and hydrocarbon development; and (iii) suggesting improvements in fiscal management of the Institute.

**Appointment of the Director:** The Director of the Institute will be appointed by the central government. The Director will be the principal academic and executive officer of the Institute.

**Funding:** The Institute will be required to maintain a fund which will be credited with the funds that it receives from the central government, fees and money received from any other sources (grants and gifts). The accounts of the Institute shall be audited by the Comptroller and Auditor- General of India.

**Settlement of disputes:** Any dispute arising out of a contract between the Institute and any of its employees will be referred to an internally constituted Tribunal of Arbitration. The Tribunal will consist of: (i) one member appointed by the Institute; (ii) one member nominated by the employee; and (iii) an umpire appointed by the Visitor (President of India). The decision of the Tribunal of Arbitration will be considered final. In case of any dispute between the Institute and the central government, the decision of the central government will be considered final.

Sources: the hindu.

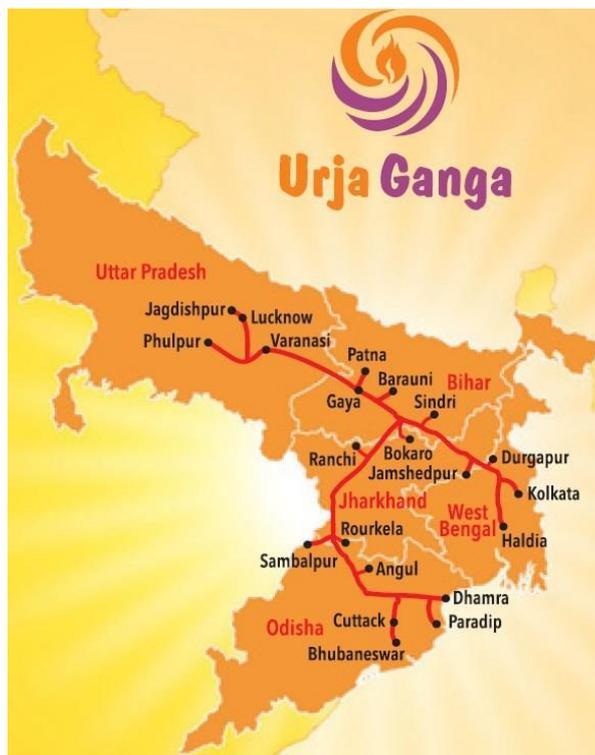
## Pradhan Mantri Urja Ganga

**Context:** State-run gas utility GAIL India has placed orders for another 400-km of pipeline of the ambitious Pradhan Mantri Urja Ganga natural gas pipeline project that will take the fuel to eastern India. With these awards, pipe supply orders for 2,100 km of the Jagdishpur-Haldia & Bokaro-Dhamra Natural Gas Pipeline (JHBDPL) project have been placed. Also, 1,700 km of line laying orders have been placed.

### About the Pradhan Mantri Urja Ganga project:

The gas pipeline project aims to provide piped cooking gas to residents of Varanasi and later to millions of people in states like Bihar, Jharkhand, West Bengal and Odisha.

- From Varanasi's perspective, an 800-km long MDPI pipeline will be laid and 50,000 households and 20,000 vehicles will get PNG and CNG gas respectively. The government estimates that around 5 lakh gas cylinders will be sent at rural areas annually.
- According to GAIL, with the Urja Ganga project, 20 lakh households will get PNG connections. The project is said to be a major step towards collective growth and development of the Eastern region of India.
- GAIL has built a network of trunk pipelines covering the length of around 11,000 km. With Urja Ganga project, this number will further increase by 2540 km.



Sources: the hindu.

**Paper 2 Topic:** Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

## World AIDS Day 2017

World AIDS Day takes place on the 1st December each year. It's an opportunity for people worldwide to unite in the fight against HIV, to show support for people living with HIV, and to commemorate those who have died from an AIDS-related illness. Founded in 1988, World AIDS Day was the first ever global health day.

### WHY IS WORLD AIDS DAY IMPORTANT?

- Globally, there are an estimated 36.7 million people who have the virus. Despite the virus only being identified in 1984, more than 35 million people have died of HIV or AIDS, making it one of the most destructive pandemics in history.
- Today, scientific advances have been made in HIV treatment, there are laws to protect people living with HIV and we understand so much more about the condition. Despite



this, many people do not know the facts about how to protect themselves and others, and stigma and discrimination remain a reality for many people living with the condition.

- World AIDS Day is important because it reminds the public and government that HIV has not gone away – there is still a vital need to raise money, increase awareness, fight prejudice and improve education.

### What is the difference between HIV and AIDS?

HIV stands for human immunodeficiency virus. This virus leads to infection and it attacks the immune system. While HIV can be transmitted between people, AIDS is a condition that is acquired only after a person has contracted the HIV infection. AIDS is the final stage of the HIV infection.

### How can HIV be diagnosed?

Serological tests, such as RDTs or enzyme immunoassays (EIAs), detect the presence or absence of antibodies to HIV-1/2 and/or HIV p24 antigen. No single HIV test can provide an HIV-positive diagnosis. It is important that these tests are used in combination and in a specific order.

Sources: pib.

## Trachoma

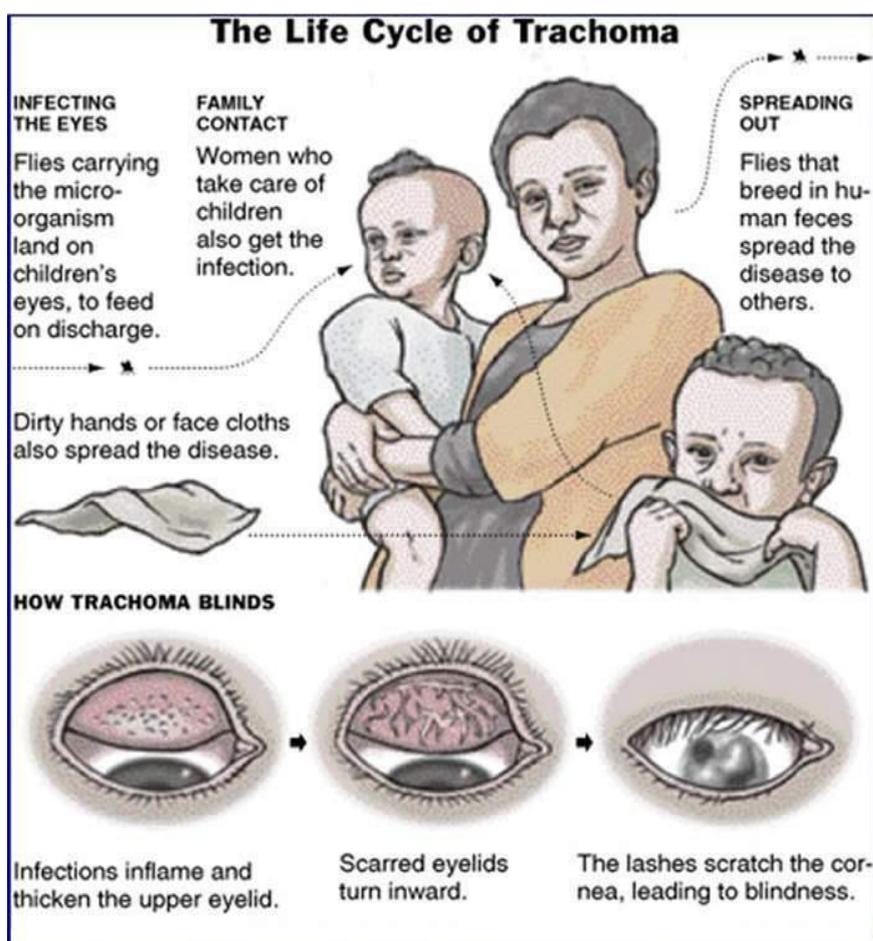
### Context:

The National Trachoma Survey Report (2014-17) has been released. India is now declared free from 'infective trachoma'.

### Highlights of the survey:

The survey findings indicate that the active trachoma infection has been eliminated among children in all the survey districts with overall prevalence of only 0.7%. This is much below the elimination criteria of infective trachoma as defined by the WHO- active trachoma is considered eliminated if the prevalence of active infection among children below 10 years is less than 5%.

The Survey results indicate that active trachoma is no longer a public health problem in India. India has now met the goal of trachoma elimination as specified by the WHO under its **GET2020 program**. This has been possible due to decades of inter-sectoral interventions and efforts that included provision of antibiotic eye drops, personal hygiene, availability of safe water, improved environmental sanitation, availability of surgical facilities for chronic trachoma, and a general improvement in the socio economic status in the country.



### About Trachoma:

**What is it?** Trachoma is a chronic infective disease of the eye and is the leading cause of infective blindness globally. Trachoma is a disease of poor environmental and personal hygiene and inadequate access to water and sanitation.

**It affects** the conjunctiva under the eyelids. Repeated infections cause scarring leading to in-turning of the eyelashes and eyelids. This further causes damage to the cornea and blindness.

**Affected states:**

It is found affecting the population in certain pockets of the States of North India like Gujarat, Rajasthan, Punjab, Haryana, Uttar Pradesh and Nicobar Islands. Trachoma infection of the eyes was the most important cause of blindness in India in 1950s and over 50% population was affected in Gujarat, Rajasthan, Punjab, and Uttar Pradesh. It was the most important cause of corneal blindness in India, affecting young children.

Sources: pib.

## Why are there disparities between States on diseases?

**Context:** The India State-Level Disease Burden report, a first-of-its-kind assessment of causes for diseases in each State from 1990 to 2016, was released recently. The report is the result of two years of intense scientific work and collaborative effort. The Global Burden of Disease methodology was used for this analysis, which is the most widely used disease burden estimation approach globally.

**Worrying trends:**

- Scientists evaluated the diseases causing the most premature deaths and ill-health in each State. They found out that life expectancy at birth in the country has improved significantly. However, the report indicated many health inequalities among States.
- The report notes that while there was a fall in the under-five mortality in every State there was also a four-fold difference in the rate of improvement among them. The per person burden from many of the leading infectious and non-communicable diseases varied 5-10 times between States.
- This can be attributed to differences in the development status, environment, lifestyle patterns, preventive health measures and curative health services between the States. In the most developed States this transition took place about 30 years ago, but in the poorest States this transition has taken place only over the past few years.

**Who suffers most?**

- Infectious and childhood diseases continue to be significant problems in the poor Empowered Action Group States of north India (Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, Rajasthan, Uttar Pradesh and Uttarakhand and Assam), which still contributes 37-43% of the total disease burden. These diseases are responsible for the inordinately high burden of premature deaths and morbidity suffered by children under five years of age in these States.
- The results show that non-communicable disease and injuries have together overtaken infectious and childhood diseases in terms of disease burden in every State, but the magnitude of this transition varies markedly between the poor States and the more developed States.

**Usefulness of this report:**

- The India State-Level Disease Burden Initiative will update estimates annually for each State based on new data that become available. It will also provide more detailed findings: for example, next year it plans to report the rural-urban differences in disease burden for each State. Detailed topic-specific reports and publications will be produced for major diseases and risk factors for deeper insights to plan their control.
- The policy applications of these findings include planning of State health budgets, prioritisation of interventions relevant to each State, informing the government's Health Assurance Mission in each State, monitoring of health-related Sustainable Development Goals targets, and assessing the impact of large-scale interventions based on time trends of disease burden. In addition, the data gaps identified in this estimation process will inform which areas of the health information system of India need to be strengthened.

**Way ahead:**

The report should be used as an important tool for health planners in India to improve health of the people more effectively.

Sources: the hindu.

## One nation, one education board

**Context:**

A three-judge Bench of the Supreme Court has dismissed a petition which sought for "one nation, one education board" to end disparity in knowledge dissemination during the formative years of a child.

EDUCATION INDUSTRY IN INDIA CURRICULUM DESIGNING AND SYLLABUS OF DIFFERENT BOARDS				
SR. NO	BOARDS	COMMITTEE ON CURRICULUM	RESOURCES	REMARKS
1	CISCE	Has its committee on curriculum and syllabus	Research, Development and Consultancy Division	Revises curriculum and syllabus as per the need
2	CBSE	Has its committee on curriculum and syllabus	NCERT (Draws member from different fields and prepare National Curriculum Framework)	Though it has its own committee on curriculum, it mainly uses the resources of NCERT
3	DELHI BOARD	Merged with CBSE	CBSE, NCERT, Delhi Text Book Bureau and SCERT Delhi	Delhi Government Education System is under the education Directorate, Delhi
4	IBO	Has its committee on curriculum and syllabus	Has a separate Research wing which prepares curriculum	Evolving fresh in curriculum and syllabus is a continuous process

**Need for a single education board:**

The fundamental right to free and compulsory education under Article 21A includes a common education system where the "rich and the poor are educated under one roof." However, the current education system under multiple boards did not provide equal opportunity to all.

**The 2011 judgment:**

- Supreme Court's dismissal of this petition is in contrast to a 2011 judgment by the Panchal Bench in the Tamil Nadu and Others versus K. Shyam Sunder and Others. In 2011, a three-judge Bench of the Supreme Court, in an appeal filed by the Tamil Nadu government, had held that a common syllabus, especially for children aged between six and 14, would achieve the "code of common culture."
- The 2011 judgment had held that the "right of a child should not be restricted only to free and compulsory education, but should be extended to have quality education without any discrimination on the ground of their economic, social and cultural background." The court had also observed that Separate education facilities are inherently unequal and violate the doctrine of equality.

**Tamil Nadu's case:**

In August 2011, Tamil Nadu became the first Indian state to have a common syllabus, textbooks and examinations. Prior to that, schools in the state were following four boards—the state board, Matriculation board, Oriental board, and the Anglo-Indian board. While the proposal was mooted a few years ago, the government managed to merge the four boards after a long legal battle. 'Samacheer Kalvi' as the common curriculum board is called is framed on the lines of National Curriculum Framework. This, however, does not include national boards like the CBSE and ICSE. While this was the first initiative of its kind, its success is yet to be measured in qualitative terms.

**Way ahead:**

The constitution of the new board requires a lot of thought and planning. The first concern is that the very credibility of our internal assessment is so low that how does one judge students? Moreover the heterogeneity of our schools – while some schools have the best of facilities and teachers, a large number of them don't even have blackboards – is a huge impediment in standardisation of education. It is a good move, but there has to be some kind of assessment of the progress made by both the student and the school.

Sources: the hindu.

## Legatum Prosperity Index

**Context:** 'The Legatum Prosperity Index 2017', an annual ranking developed by the London-based Legatum Institute, has been released.

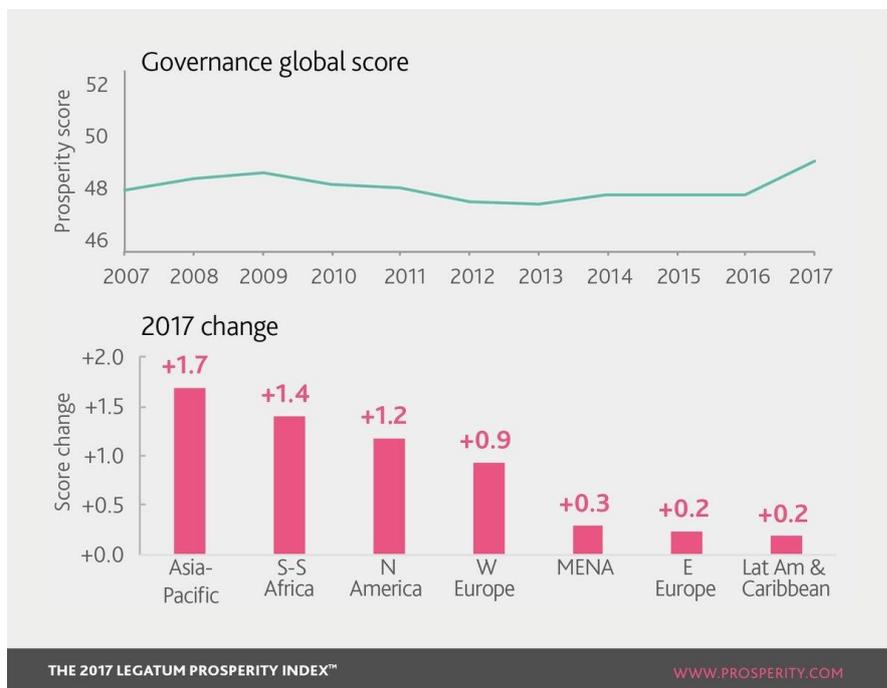
**About the Legatum Prosperity Index:**

The Legatum Prosperity Index is the world's leading global measure of economic and social wellbeing that studies 104 indicators under these categories: Economic Quality, Business Environment, Governance, Personal Freedom, Social Capital, Safety and Security, Education, Health and Natural Environment. The Index offers a unique insight into how prosperity is forming and changing across the world.

**Key findings:****Global prosperity at a record high:**

World prosperity increased in 2017 and now sits at its highest level in the last decade. It is now 2.6% higher than in 2007. Furthermore, prosperity growth has been faster from 2012 to 2017 than it was from 2007 to 2012. However, the gap between the highest and lowest scores in the Index has increased for five straight years and the spread between nations is growing, indicating that while prosperity as a whole may be increasing, not all countries are yet benefiting from the increase.

**Asia-Pacific makes the greatest gains:** While prosperity improved around the world in 2017, no region grew as fast as Asia-Pacific. Gains came through a fast-improving Business Environment, especially in the population centres of India



(100th), China (90th), Pakistan (137th) and Indonesia (59th). It is now easier to access credit, and intellectual property rights have improved.

**Improved government accountability:** Every region in the world improved in Governance in 2017, with Asia and Sub-Saharan Africa rising fastest. Across the world judiciaries became more independent from state interference and the process of challenging governmental regulation became easier. People also became more confident in the outcome of elections.

**Decreasing Safety and Security in the MENA region:** Despite gains in Social Capital and a strengthening Business Environment, overall prosperity in the Middle East and North Africa (MENA) has suffered in recent years through worsening Safety and Security. Casualties from both war and terrorism have increased, along with a rise in state-sponsored violence.

Sources: toi.

## ATL Community Day

### Context:

NITI Aayog's Atal Innovation Mission has decided to celebrate Atal Tinkering Lab's Community Day on December 15<sup>th</sup>.



### About the ATL Community Day:

The Atal Tinkering Lab Community Drive Initiative is aimed at maximizing the impact of Atal Tinkering Labs by extending innovation to children in the community who do not have access to formal educational institutions. The purpose of this initiative is to provide these children with the same educational tools as the students in Atal Tinkering Labs to enable them to become problem solvers.

The day will mark the Community Drive Initiative in which 25 young Mentors will engage with more than 200 students who are not enrolled in the formal education system. These mentors will visit four locations in New Delhi to conduct brief sessions with children from various NGOs, on how innovations can help resolve the problems in the communities.

### Background:

NITI Aayog's Atal Innovation Mission is among one of the flagship programs of the Government of India to promote innovation and entrepreneurship in the country to set up the Atal Tinkering Labs across the country. The Mission has / is in the process of setting up 900+ such labs across India and aims to have 2,000 such labs by end of 2017.

Atal Tinkering Labs are dedicated works spaces where students learn innovation skills and develop ideas that will go on to transform India. The labs are powered to acquaint students with state-of-the-art equipment such as 3D printers, robotics & electronics development tools, Internet of things & sensors etc.

Sources: pib.

## Atal Innovation Mission

**Context:** NITI Aayog's Atal Innovation Mission (AIM), Government of India's flagship program to promote innovation and entrepreneurship nationwide in schools, universities and industry, has selected additional 1500 Schools for establishment of Atal Tinkering Labs (ATLs).

The addition of these schools will give a major boost to realize the vision of the mission to 'Cultivate One Million children in India as the Innovators of tomorrow'. With this announcement of the new Atal Tinkering Labs, AIM, has selected 2441 Schools across India to establish ATLs to date since it began its operations over a year ago.

**What are Atal Tinkering Labs?**

ATLs are innovation play workspaces for students between Grade VI to Grade XII, stimulating innovations combining science & technology. These open-ended innovation workspaces equipped with state of the art technologies like 3D printers, Robotics, Sensor Technology Kits, Internet of Things, miniaturized Electronics etc enable the students to learn and solve local community problems using emerging Technologies. Students are encouraged to explore and experience Design Thinking and Innovation, using a do-it-yourself approach, and develop innovative solutions to India's social, community or economic problems.

Sources: the hindu.

## World Trade Organization conference

The Eleventh Ministerial Conference (MC11) of the WTO was held in Buenos Aires, Argentina. The meeting ended in stalemate after U.S. criticism and member country vetoes, raising questions about the body's ability to govern increasingly disputed global trade. However, the outcome of the conference was a positive one for India as the country was able to secure the interests of its farmers as well food security for the poor.



India was successful stopping any of the new issues like investment facilitation and micro, small and medium enterprises (MSMEs) from entering the ambit of the WTO. India became the second largest proponent of issues after the EU as it submitted proposals on six issues — public stock-holding, special safeguards mechanism, domestic regulation, domestic support, trade facilitation in services, and eCommerce.

**India Impact:****What India wanted?**

- A permanent solution for food security by improving existing peace clause.
- Stopping entry of new issues like investment facilitation, e-commerce, MSMEs.
- Safeguarding WTO and multilateralism.

**What India got?**

- No dilution in peace clause that protects MSP programmes for food grain.
- No fast-tracking of e-commerce talks.
- No commitments to curb fisheries subsidies.
- New issues and non trade issues like gender and trade were not taken forward.

**What should India do now?**

- Get legal backing for permanent solution.
- Broaden interests on agriculture and services.
- Form coalition to push interests.

**What is peace clause?**

It is an interim mechanism, as per which WTO members had agreed not to challenge developing nations at the WTO Dispute Settlement Mechanism if they breached the cap of the product-specific domestic support (which is 10% of the value of production). The 'Peace Clause' is available to developing nations, including India, till a permanent solution is found to public stock holding for food security purposes.

The limited window offered by the Western powers for the peace clause was seen by India as insufficient assurance. The clause also requires full disclosure of MSPs and annual procurement for food security programmes, which the Government fears would leave India open to questioning by other countries on domestic matters.

**Why is it important?**

The right to food is a basic human right. Therefore, Western misgivings about a country like India – where a third of the 1.3 billion-population lives beneath the poverty line – providing food subsidies seems hypocritical. The developed

nations see India as a huge market for foodgrains and other products, but their produce is rendered uncompetitive when the government is willing to subsidise farmers, purchase their produce for a minimum support price and then sell it at a loss through the public distribution system and other channels.

Accepting a temporary peace clause would be tantamount to admitting that the subsidy programmes in India and other developing nations violate global trade norms, leaving the nation a sitting duck if a complaint was to be raised in the WTO or other international forums later. This would also result in India losing its biggest bargaining chip in future WTO meetings.

Sources: the hindu.

## Karnataka HC strikes down rule on stringent tobacco pack warnings

**Context:** Karnataka High Court has declared as unconstitutional the Cigarette and other Tobacco Products (Packaging and Labelling) Amendment Rules, 2014, which had enhanced to 85% the area of pictorial warning on the principal area of packages of cigarette and other tobacco products.

**The court cited the following reasons for this move:**

- The Ministry of Health and Family Welfare unilaterally framed the Rules without concurrence of the other departments concerned, and this was a violation of the Article 77 (Conduct of Business of Government of India) and the Transaction of Business (ToB) rules framed under it as the subject of tobacco control and legislation was not attached to one department or Ministry.
- Also, the rules were notified even before the Parliamentary Committee on sub-ordinate legislations was examining them. Ministry of Commerce had also opposed 85% area for pictorial warning on the ground that it would not result in any benefit and wanted to restrict the pictorial warnings to 40% or 50% . And the Labour Ministry too had opposed pictorial warning for the reason that it would harm the beedi industry, on which several poor families are depending upon for their livelihood.
- The rules are also contrary to Article 19(1)(g) [right to practise any profession, or to carry on any occupation, trade or business] as they are “unreasonable” restrictions imposed “without application of mind or any basis.”

**Background:**

A notification by the health ministry on 24 September 2015 for implementation of the Cigarettes and other Tobacco Products (Packaging and Labeling) Amendment Rules, 2014 came into force on 1 April. It prescribed larger pictorial warnings, covering 85% of the size of the packets of tobacco products, including cigarettes and beedis.

Sources: the hindu.

## Meghalaya launches India's first social audit law

With the launch of ‘The Meghalaya Community Participation and Public Services Social Audit Act, 2017’, Meghalaya has become the first state in India to operationalise a law that makes social audit of government programmes and schemes a part of government practice.

**Key facts:**

- The legislation provides a legal framework for allowing citizens’ participation in the planning of development, selection of beneficiaries, concurrent monitoring of programmes, redress of grievances, and audit of works, services, and programmes on an annual basis. The legislation is applicable to 11 departments and 21 schemes.
- A social audit facilitator will be appointed to conduct the audit directly with the people. He will present findings to the Gram Sabha, who will add inputs and the result will finally go to the auditors.

**Significance of the Act:**

First, it will make it easier to correct course as the scheme is rolling along; the audit is not after all the money has been spent. Two, it gives people a direct say in how money will be spent and fills an information gap for officers as they are directly in touch with the ground. Third, social audits have been civil society initiatives rather than government-mandated. They are now part of the system.

Sources: the hindu.

## IMA tightens the screws on antibiotic prescriptions

**Context:** Alarmed over the growing antibiotic resistance that has made it difficult to treat many bacterial infections, the Indian Medical Association (IMA) has advised doctors to follow strictly guidelines while prescribing antibiotics. IMA has advised its members to mandatorily restrict the usage of antibiotics for treatment of proven bacterial infections. It has also come out with a policy on anti-microbial resistance.

### WHAT YOU NEED TO KNOW ABOUT

## ANTIBIOTIC RESISTANCE

Antibiotic resistance arises when bacteria change to protect themselves against an antibiotic.

Resistance is increasing and the number of effective antibiotics is decreasing. This means that one day no antibiotics may be left to fight life-threatening diseases.



In the last

**25 YEARS**

no new antibiotics have been developed.



#### WHAT DO ANTIBIOTICS DO?

Antibiotics are medicines used to treat infections caused by bacteria such as tuberculosis, blood stream infections and pneumonia. They kill the bacteria or stop them from growing.

Antibiotics and vaccinations have added

**20 YEARS**  
to our lives.



#### ANTIBIOTICS KILL BACTERIA - NOT VIRUSES.

Take antibiotics only when prescribed by a doctor for bacterial infections. Do not take them for illnesses caused by viruses such as colds and influenza. They will not work.

**9 OUT OF 10 TIMES**  
a sore throat is  
caused by a virus.



### WHY DOES IT MATTER?

Taking an antibiotic unnecessarily decreases its effectiveness against bacterial infections, so it might not work when really needed. Always check with your doctor before using an antibiotic.

### WHAT CAN YOU DO?

- ✓ Use antibiotics only when prescribed by a doctor, and ensure your family does so.
- ✓ Take the full prescription, even if you are feeling better.
- ✓ Never share antibiotics with others or use leftover prescriptions.

More information at <http://www.euro.who.int/amr>

**Concern:**

Despite the Indian Council of Medical Research (ICMR) setting up the National Anti-Microbial Resistance Research and Surveillance Network (AMRRSN) to enable compilation of data of such resistance at different levels of healthcare and publishing of treatment guidelines for anti-microbial use in common syndromes, the problem of multi-drug resistance due to widespread and indiscriminate use of antimicrobial and antibiotic drugs continues unabated in the country.

**What is antibiotic resistance?**

Antibiotics are medicine used to treat infections caused by bacteria. Antibiotic Resistance refers to resistance developed by bacteria against antibiotics or the ability of bacteria to mutate or change so as to resist the effects of antibiotics. The more we use them, and the more we abuse them, the less effective they become.

Antibiotics are unquestionably useful against bacterial infections. However, indiscriminate use has resulted in development of resistance in patients with bacterial infections thereby leading to long lasting illnesses. It is driven by overusing antibiotics and prescribing them inappropriately.

Sources: the hindu.

## E-cigarettes

**Context:** The government is examining the legal implications and health effects of e-cigarettes.

The Health Ministry has constituted three groups to study the various aspects of e-cigarettes. One was to study the legal implications of this e-nicotine drug induce system, another was to go into the health effects and the other was to study advocacy.

**What are e-cigarettes?**

An electronic cigarette (or e-cig) is a battery-powered vaporizer that mimics tobacco smoking. It works by heating up a nicotine liquid, called "juice." Nicotine juice (or e-juice) comes in various flavors and nicotine levels. e-liquid is composed of five ingredients: vegetable glycerin (a material used in all types of food and personal care products, like toothpaste) and propylene glycol (a solvent most commonly used in fog machines.) propylene glycol is the ingredient that produces thicker clouds of vapor.

Proponents of e-cigs argue that the practice is healthier than traditional cigarettes because users are only inhaling water vapor and nicotine.

**Need for regulation:**

- In India smoking devices are easily available through online shopping portals and with little information out in the public domain about the ill-effects of e-cigarettes there is a misconception that it is less harmful than traditional cigarettes.
- Smart marketing and inadequate information on the nicotine content in e-cigarettes has created a false impression that these devices are not as harmful as regular cigarettes. In the absence of a regulation the use of e-cigarettes has grown; they are easily accessible to even the non smokers.
- Along with the traditional cigarette manufacturing, there is a parallel industry of e-cigarette like devices growing in India, which is under-regulated.

**Harmful effects of e cigarettes:**

Although they are generally thought to be less harmful than smoking real cigarettes, because they contain no tobacco, they do still contain the addictive chemical nicotine. Scientists have confirmed that e-cigarette vapours to contain the same potentially dangerous chemicals.

Research has also confirmed that e-cigarette vapours contain free radical chemicals previously thought only to be found in tobacco cigarettes and air pollutants. Free radicals are highly reactive agents that can damage DNA or other molecules within cells, resulting in cell death. Cigarette smoke contains 1014 free radicals per puff. Though e-cigarette vapour contains far fewer free radicals than cigarette smoke – one percent as much – their presence in e-cigarettes still suggests potential health risks.

Sources: the hindu.



## WHO to recognize gaming disorder as mental health condition in 2018

In the draft of its forthcoming 11th International Classification of Diseases, the World Health Organization includes “gaming disorder” in its list of mental health conditions. The new ICD-11 entry on gaming disorder “includes only a clinical description and not prevention and treatment options.”



### What is gaming disorder?

The WHO defines the disorder as a “persistent or recurrent” behavior pattern of “sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning.” The disorder is characterized by “impaired control” with increasing priority given to gaming and “escalation,” despite “negative consequences.”

### About International Classification of Diseases:

**What is it?** ICD is the “basis for identification of health trends and statistics globally and the international standard for reporting diseases and health conditions. It is used by medical practitioners around the world to diagnose conditions and by researchers to categorize conditions.” The WHO’s ICD lists both mental and physical disorders.

**What is it for?** This comprehensive list is intended to make it easier for scientists to share and compare health information between hospitals, regions and countries. It also enables health care workers to compare data in the same location over different time periods. Additionally, public health experts use the ICD to track the number of deaths and diseases.

Sources: the hindu.

**Paper 2 Topic:** *Development processes and the development industry the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders.*

## 6th International Tourism Mart

**Context:** The Ministry of Tourism, Government of India, in association with the North Eastern States is organising the “International Tourism Mart” (ITM) in Guwahati, Assam.

**Focus areas:** The 6th International Tourism Mart, will put the spotlight on India’s “Act East Policy”, blossoming ties with ASEAN and the larger East Asia region, home to the world’s rapidly growing economies and India’s emerging tourism markets.

### About International Tourism Marts:

The International Tourism Marts are organised in the North Eastern States on rotation basis. The earlier editions of this mart have been held in Guwahati, Tawang, Shillong, Gangtok and Imphal.

This is the 6th International Tourism Mart and an annual event organised in the North Eastern region with the objective of highlighting the tourism potential of the region in the domestic and international markets. It brings together the tourism business fraternity and entrepreneurs from the eight North Eastern States.

### Background:

The North East Region of India comprising the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, is endowed with diverse tourist attractions and products. The varied topography of the region, its flora and fauna, the ethnic communities with their rich heritage of ancient traditions and lifestyles, its festivals, arts and crafts, make it a holiday destination waiting to be explored.

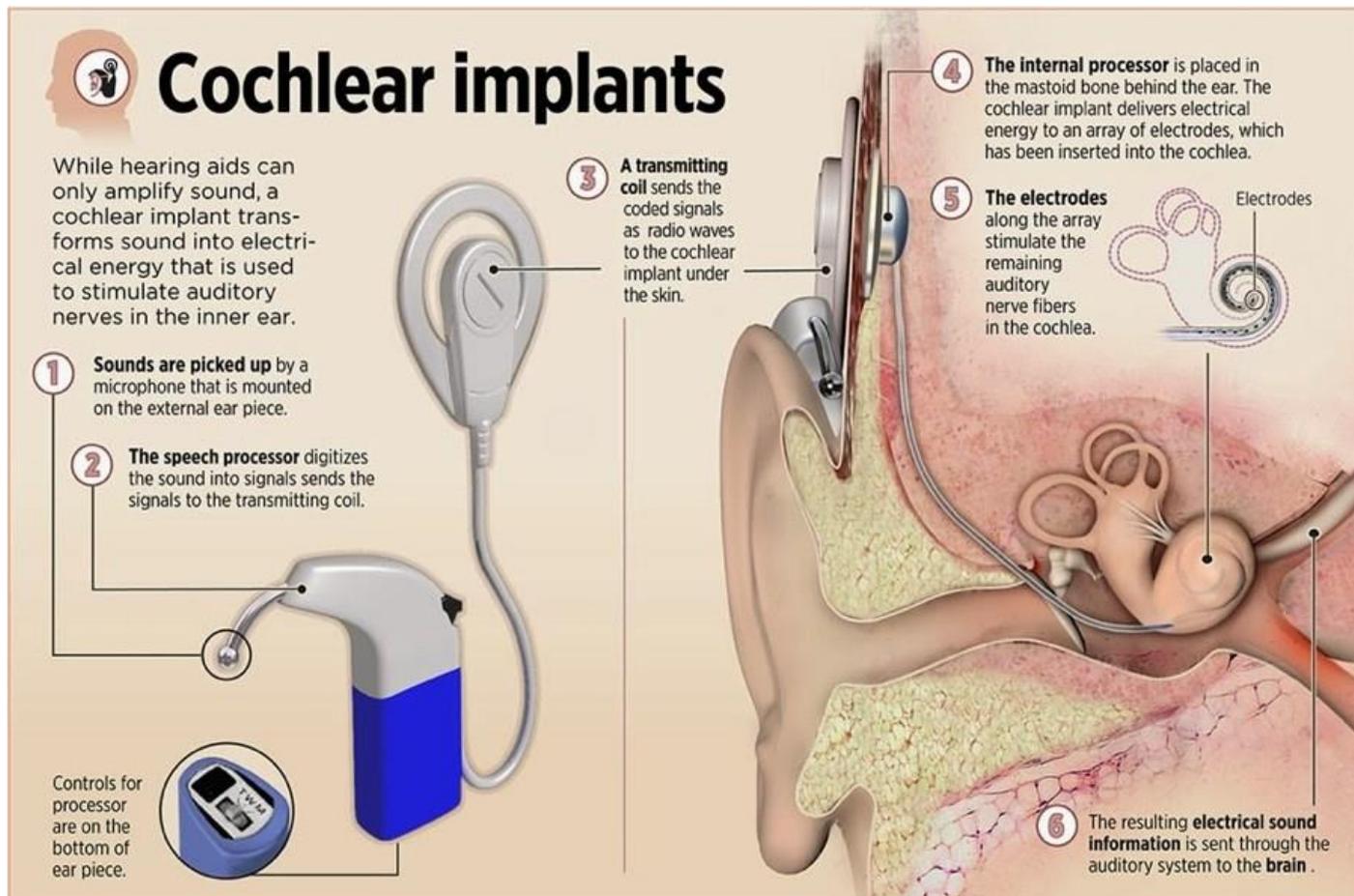


Sources: pib.

## CSR Summit for Pioneering Cochlear Implant Surgery

### Context:

CSR Summit for Pioneering Cochlear Implant Surgery under CSR initiative of Airport Authority of India (AAI) through Artificial Limbs Manufacturing Corporation of India (ALIMCO) was recently inaugurated. This major CSR initiative of AAI will help the children to completely overcome their hearing disability, thereby enabling them to hear and speak coherently and making them fully independent to lead a normal and productive life. This effort will not only bring these underprivileged children to the mainstream of life but will also contribute to national economy.



### Background:

An estimate shows that around 35,000 children need Cochlear Implant annually in India. Government of India has made provision to sponsor 500 numbers under the ADIP Scheme which is minuscule in comparison to actual requirement. Till date more than 1000 number of Cochlear Implant Surgeries have been successfully conducted in the country under the ADIP Government of India and CSR funds.

### About Cochlear implant:

Cochlear Implant is an electronic device having two parts (External and Internal). Internal part is surgically implanted in the skull (Cochlear) by ENT surgeons. Post-operative rehabilitation is undertaken by Audiologist and speech language pathologist and special educator of Hearing Impaired. Parent have very important role in stimulating child to learn speech and language at home and maintain the external part (Processor).

### The cochlear implant technology may help children who:

- Have severe to profound hearing loss in both ears.
- Receive little or no benefit from hearing aids.
- No Development Delay or Mental Retardation.

### About CSR:

Corporate Social Responsibility (CSR) acknowledges the corporation's duty that the corporation owes to the community within which it operates. It regards the community as an equal stakeholder.

As per provision of Company Act 2013 it is now mandatory for all companies to contribute 2% of their 3-year average annual net profit on their CSR activities as mentioned in Schedule VII of the acts with effect from April, 2014. Further added in Scheduled VII there is provision of aids and appliances to Divyangjans under 'Promoting Health and Care including preventive health care'.

Activities undertaken by corporates under their CSR obligation could prove a game changer for providing sustainable development in Social Sector. Disability sector is one of the area which needs to be addressed for inclusive growth of the society and CSR provide the huge opportunity to serve the persons with disabilities that fall under vulnerable section of society.

Sources: pib.

## National Service Scheme

### Context:

The President Shri Ram Nath Kovind recently presented National Service Scheme Awards 2016-17.

**Objective of NSS Awards:** The objective of NSS Awards is to recognize and reward outstanding contributions towards voluntary community service made by the Universities/ Senior Secondary (+2) Councils, NSS Units/ Programme Officers and NSS Volunteers, with a view to further promote NSS.

### About National Service Scheme (NSS):

#### What is it?

NSS is a Centrally Sector Scheme. The Scheme was launched in the year 1969 with the primary objective of developing the personality and character of the student youth through voluntary community service. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. Very appropriately, the motto of NSS is "NOT ME, BUT YOU".

#### Programme Structure:

NSS is being implemented in Senior Secondary Schools, Colleges and Universities. The design of the NSS envisages that each educational institution covered under the Scheme has at least one NSS unit comprising of normally 100 student volunteers, led by a teacher designated as Programme Officer (PO). Each NSS unit adopts a village or slum for taking up its activities.

#### Nature of Activities under NSS:

Briefly, the NSS volunteers work on issues of social relevance, which keep evolving in response to the needs of the community, through regular and special camping activities. Such issues include (i) literacy and education, (ii) health, family welfare and nutrition, (iii) environment conservation, (iv) social service programmes, (v) programmes for empowerment of women, (vi) programmes connected with economic development activities, (vii) rescue and relief during calamities, etc.

Sources: pib.

## The Prevention of Torture Bill, 2017

**Context:** The Prevention of Torture Bill, 2017 has been introduced in the Parliament as a private member's bill. Private members' bills can be introduced by any member of Parliament who is not a minister but seldom get enacted.

### Highlights of the Bill:

- The Bill proposes at least three years of imprisonment for a public servant who inflicts torture on anybody for a confession or even for information that may lead to the detection of an offence. The punishment could be extended to ten years.
- A public servant who intentionally does any act to cause grievous harm to somebody, even if in police custody, shall be punished.

### Significance of this move:

The proposed legislation fulfils India's commitment, as confirmed to the United Nations, that "torture and other cruel, inhuman or degrading treatment or punishment" are prohibited and constitute serious violations of human rights. The

152nd report of the Law Commission on “Custodial Crimes” had also recommended changes to the law to make torture punishable.

### Background:

India is one of only eight countries out of 170 signatories to the United Nations convention against torture and other inhuman treatment or punishment yet to ratify it.

### UN convention against torture:

India has signed the UN Convention against torture way back in 1997. But, it has still not ratified it. The Convention defines torture as a criminal offence. The Convention requires states to take effective measures to prevent torture in any territory under their jurisdiction, and forbids states to transport people to any country where there is reason to believe they will be tortured.

Sources: et.

## Action plan for the backward districts

**Context:** The government has drawn up tailor-made action plans for 115 identified “most-backward” districts in the country to improve their socio-economic profiles by making available basic services like healthcare, sanitation and education as well as basic physical infrastructure like roads and drinking water supply in a time-bound manner.

**Focus:** The government’s focus is to work with states to bring a transformative change in these backward areas through rapid government-anchored programmes and interventions by 2022, the 75th year of India’s independence.

### Selection of backward districts:

The 115 districts, including 35 affected by left-wing extremism, were selected on parameters like deprivation (extent of landless households), health & nutrition (institutional delivery, stunting of children and wasting in children), education (elementary dropout rate and adverse pupil-teacher ratio) and infrastructure (un-electrified homes, lack of toilets, villages not connected by road and lack of drinking water).

### Need for tailor made action plans:

In 2016, India ranked 131 among 188 nations in the UN Development Programme’s human development index (HDI) with major inter-state and inter-district variations. Nearly 40% of children born in India are stunted and/or underweight while almost 50% of women are anemic. On nutrition, India even lags behind its neighbours such as Pakistan, Bangladesh, Sri Lanka, Nepal and China.

Among states, in Jharkhand nearly 50% children are underweight, 64% of class 5 students can’t read standard 2 English, density of population to doctor/hospital beds are the lowest in the country and 40% households are not electrified. While at least one district has been included from each state under the backward district programme, Jharkhand has the highest number of districts with 19, followed by Bihar (13) Chattisgarh (10) and 8 each in Uttar Pradesh, Madhya Pradesh, Odisha.

Sources: et.

### Key parameters for evaluation

#### Health & nutrition



Attended birth, immunisation, breast-feeding & stunting

#### Education



Computing & reading ability, attendance & vocational education

#### Sanitation



Access to toilet, drinking water

#### Infrastructure



Electricity, internet, road & potable water

#### Financial inclusion



Employment, access to banking & households covered under direct benefit transfer schemes

**Progress on each indicator will be monitored quarterly and annually; districts will then be ranked based on performance**

## 25th National Children's Science Congress

**Context:** The 25th edition of National Children Science Congress (NCSC-2017) was recently held Gandhinagar, Gujarat.

**The theme** of the five-day Congress this was 'Science and Innovation for Sustainable Development' with the special focus on persons with disabilities.

**About the National Children's Science Congress:**

**What is it?** National Children's Science Congress (NCSC) is a nationwide Science Communication programme started in the year 1993. It is a programme of National Council for Science and Technology Communication (NCSTC), Department of Science and Technology, Government of India organised nationally by NCSTC-Network, New Delhi.

**Objectives:** The primary objective of the Children's Science Congress is to make a forum available to children of the age-group of 10-17 years, both from formal school system as well as from out of school, to exhibit their creativity and innovativeness and more particularly their ability to solve a societal problem experienced locally using the method of science.

**Significance:** The Children's Science Congress encourages a sense of discovery. It emboldens the participants to question many aspects of our progress and development and express their findings in their vernacular.




**25th NATIONAL CHILDREN'S SCIENCE CONGRESS**  
27 - 31st December, 2017  
Science City | SAL Education Campus | Ahmedabad

**FOCAL THEME :**  
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Sources: the hindu.

## Plea in SC seeks OBC status for farmers

The Supreme Court has called for a response from the Centre, the Gujarat Government and the National Commission for Backward Classes (NCBC) on a PIL praying that 'farmers' be included in the category of Other Backward Classes (OBC) irrespective of their caste and religion.

**Background:**

A PIL has been filed in the Supreme Court seeking the inclusion of farmers who do not fall in the creamy layer in OBC category to ensure uplift for such farmers as constitutional rights considering them as occupational group.

**What has been sought?**

Citing apex court precedents in *Indra Sawhney Vs. Union of India* wherein it was categorically held that the benefit of reservation can be extended to OBCs, inter alia, based on quantifiable data, the petitioner sought the court to direct

the government to “prepare the survey report as well as the review report about the development and progress for inclusion and exclusion of classes who are getting the benefit of reservation under the provisions of law, as well as the method adopted for identification of backward classes. It also called for laying down appropriate rules, guidelines for determination of the income limit which can be served as the basis for future exercise by the government.

Sources: the hindu.

## Strive Project

**Context:** A Financing Agreement for IDA Credit of USD 125 million (equivalent) for the “Skills Strengthening for Industrial Value Enhancement Operation (STRIVE) Project” was recently signed by the Government of India with the World Bank.

**The Objective of the operation** is to improve access to quality and market-driven vocational training provided in it is and apprenticeships.

### **About the Skill Strengthening for Industrial Value Enhancement (STRIVE) project:**

**What is it?** STRIVE is an outcome focused scheme marking shift in government’s implementation strategy in vocational education and training from inputs to results. STRIVE will focus to improve on the quality and the market relevance of vocational training provided in ITIs and strengthen the apprenticeship programme through industry-cluster approach.

**The result areas** for the project include Improved Performance of Industrial Training Institutes; Increased Capacities of State Governments to Support Industrial Training Institutes and Apprenticeship Training; Improved Teaching and Learning; and Improved and Broadened Apprenticeship Training.

Sources: pib.

**Paper 2 Topic:** Role of civil services in a democracy.

## Rajasthan ordinance on immunity for public servants

**Context:** A controversial criminal law ordinance of the Rajasthan government, which gave protection to public servants and imposed restrictions on the media, has lapsed. The state government is now forced to reconsider the new piece of proposed legislation.

### **Background:**

The Criminal Laws (Rajasthan Amendment) Ordinance, 2017 was promulgated on September 6. A Bill seeking to replace the ordinance was tabled in the state Assembly on October 23. However, the state government referred the Bill to a select committee of the House for its review following an all-round criticism. After the Bill’s introduction in the Assembly, the ordinance was valid for a six-week period, which has now ended.

### **Way ahead:**

The select committee will decide the fate of the Bill, which has sought to amend the Criminal Procedure Code and Indian Penal Code, and give its recommendation either to withdraw the Bill or re-introduce it in the Assembly with some amendments.

### **About the Criminal Laws (Rajasthan Amendment) Bill:**

The Criminal Laws (Rajasthan Amendment) Ordinance, 2017, seeks to protect serving and former judges, magistrates and public servants in the State from being investigated for on-duty action, without government sanction.

It also bars the media from reporting on such accusations till the sanction to proceed with the probe is given by the government.

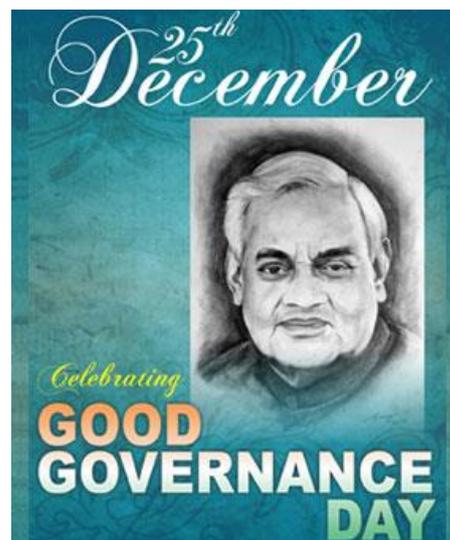
Sources: the hindu.

## Good Governance Day 2017

**Context:** Good Governance Day is observed annually on December 25th, the birth anniversary of former Prime Minister Atal Bihari Vajpayee. Good Governance Day was established in 2014 to honor Mr Vajpayee by fostering awareness among the people of accountability in government. In keeping with this principle, the Good Governance Day has been declared to be a working day for the government.

### Objectives of Good Governance Day:

- To make people aware about the government commitment for providing a transparent and accountable administration in the country.
- To enhance the welfare and betterment of the people.
- To standardise the government functioning and to make it a highly effective and accountable governance for the citizens of the country.
- To implement the good and effective policies to complete a mission of good governance in India.
- To enhance the growth and development in the country through good governance.
- To bring citizens closer to the government to make them active participants in the good governance process.



Sources: the hindu.

## Centre moves SC against fixed term for police chiefs

The Union government has filed an interlocutory application in the Supreme Court to amend a 2006 order of the court that is being used by the States to appoint “favourites” as Directors-General of Police.

### What's the issue?

A 2006 court order ensured a two-year fixed term for the DGPs. The court issued the order for a fixed two-year term for the DGPs after Prakash Singh, former DGP of Uttar Pradesh, filed a petition on police reforms. However, some States are misusing the order and appointing officers about to retire, giving them a fixed term of two years, irrespective of the superannuation date. Most of the time these appointments are done for political gains as the officer will be obliged to return favours. The implementation of the order is not monitored effectively.

### Background:

The All India Services Act, 1951, bars any officer from remaining in office after retirement, unless cleared by the Centre. The Home Ministry is the cadre-controlling authority for IPS officers, and the Supreme Court order is being increasingly misused by the States to appoint officers close to the regime.

### Need for fixed tenure:

Transfers are often used as instruments of reward and punishment, with officials being frequently transferred on the whims and caprices as well as the personal needs of local politicians and other vested interests. Officers, especially those in the All India Services, serving in state governments, have no stability or security of tenure.

Therefore, it is felt that guaranteeing a ‘minimum assured tenure’ in postings would effectively deter politicians from using transfers as a threatening weapon against the babus (read bureaucrats). Fixing tenure of bureaucrats will also promote professionalism, efficiency and good governance.

### Way ahead:

The Ministry is planning to lay down guidelines to ensure that only those who had a minimum of one-and-a-half to two years to retire were included in the panel.

Sources: the hindu.

**Paper 2 Topic:** Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

## MSME Sambandh

### What is it?

- It is a Public Procurement Portal launched recently by the government. The objective of the portal is to monitor the implementation of the Public Procurement from MSEs by Central Public Sector Enterprises.
- With this app, the Micro and Small Enterprises would be able to access the information about the products being procured by CPSEs. Thus, it would help the MSEs in participating in the procurement process.

### Background:

The Procurement Policy launched in 2012 mandates the Central Government Departments / CPSUs to procure necessarily from MSEs i.e. every Central Ministry / Department / PSU shall set an annual goal for procurement from the MSE sector at the beginning of the year, with the objective of achieving an overall procurement goal of minimum of 20% of the total annual purchases of the products or services produced or rendered by MSEs. By creating an online portal, the Ministries and the CPSEs can assess their performance.

### Significance of MSME:

MSME sector generates more employment next only to Agriculture sector. 80% of jobs in industry is given by MSME with just 20% of investment.

Sources: pib.

## E-Courts Project

### Context:

The e Committee, of the Supreme Court of India in association with the Department of Justice (DoJ) of the Government of India recently held a National Conference on e- courts project in New Delhi. The Conference focused on the progress, sharing of best practices, experiences, important issues and emerging challenges under the Project.



### About the e- courts project:

#### What is it?

The eCourts Mission Mode Project (Phase I 2010-15; Phase II 2015-19) is a national eGovernance project for ICT enablement of district and subordinate courts of the country.

**Implementation:** It is being implemented by the Government of India with a total outlay of 1670 crores (Phase II).

**The major objectives of the Project** are to make whole judicial system ICT enabled by putting in place adequate and modern hardware and connectivity; automation of workflow management in all courts; electronic movement of records from taluka/trial to appeal courts; installation of video conferencing (VC) facility and recording of witness through Video Conferencing.

**Specific targets set under the Project include:** computerization of all the courts (around 20400) and DLSA and TLSC; WAN and cloud connectivity in 3500 court complexes; full Installation and use of Video Conferencing facility at 3000 Court Complexes and 1150 prisons; charting out key identified citizen services like electronic filing, daily orders, delivery of decrees, online case status in all the district courts etc.

Sources: pib.

## Laqshya | Labour Room Quality Improvement Initiative

**Context:** The government has launched “LaQshya – Labour Room Quality Improvement Initiative, a Safe Delivery Mobile Application for health workers who manage normal and complicated deliveries in the peripheral areas.




सत्यमेव जयते  
Ministry of Health and Family Welfare  
Government of India



# LAQSHYA

## The National Labour Room Quality Improvement Initiative

LAQSHYA is an initiative to improve the Quality of Care (QoC) in the Labour Rooms (LRs), Operation Theatres (OTs) and other mother and child service areas in public health facilities across the country. The program aims to reduce complications and deaths of mothers and babies around the period of child birth which contributes to highest proportion of maternal and newborn deaths.

LaQshya brings together Quality Assurance (QA) and Quality Improvement (QI) approaches and strives to provide a better experience of care to the beneficiaries by integrating the concept of respectful maternity and newborn care.

### SCOPE

Starting with government Medical Colleges and District Hospitals, the program shall be implemented in all First Referral Units (FRUs) and High case load Community Health Centers (CHCs).

### KEY COMPONENTS

- ✦ Organization and standardization of LR, OTs and Obstetric High Dependency Units (HDUs)/Intensive Care Units (ICUs) as per national guidelines and standards.
- ✦ Structured QI efforts/processes to improve adherence to critical practices around childbirth.
- ✦ Environment and processes for ensuring improved client satisfaction like “Respectful Maternity Care” (RMC).

### PROGRAM STRUCTURE

LEVEL	QUALITY STRUCTURE	QUALITY DRIVERS
NATIONAL	Central Quality Supervisory Committee	NATIONAL MENTORING GROUP
STATE	State Quality Assurance Committee	STATE MENTORING GROUP
DISTRICT	District Quality Assurance Committee	COACHING TEAM
FACILITY	Quality Team	QUALITY CIRCLE (LR&OT)

Photo Credit: © 2006 Dibyendu Dey Choudhury, Courtesy of PhotoShare

**About LaQshya:**

**What is it?** LaQshya is mobile app for health workers who manage normal and complicated deliveries in the peripheral areas. The goal of this initiative is to reduce preventable maternal and new-born mortality, morbidity and stillbirths associated with the care around delivery in Labour room and Maternity OT and ensure respectful maternity care.

**Aim:** It aims to improve the quality of care that is being provided to the pregnant mother in the Labour Room and Maternity Operation Theatres, thereby preventing the undesirable adverse outcomes associated with childbirth.

**Implementation:** This initiative will be implemented in Government Medical Colleges (MCs) besides District Hospitals (DHs), and high delivery load Sub- District Hospitals (SDHs) and Community Health Centres (CHCs). The initiative also plans to conduct quality certification of labour rooms and also incentivize facilities achieving the targets outlined.

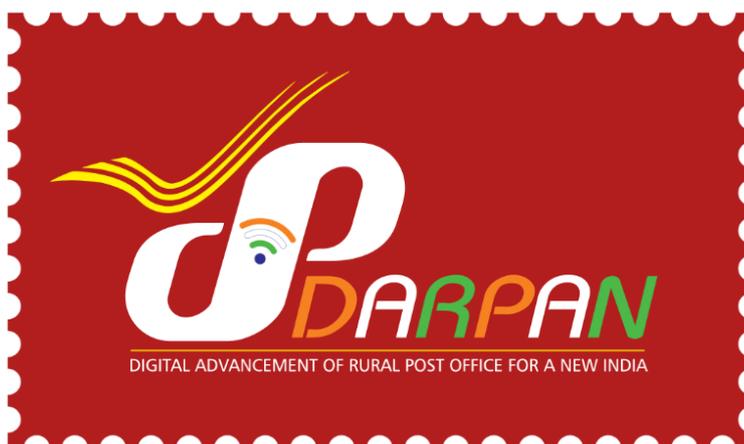
Sources: pib.

## DARPAN Project

**Context:**

DARPAN – “Digital Advancement of Rural Post Office for A New India” Project has been launched to improve the quality of service, add value to services and achieve “financial inclusion” of un-banked rural population.

**The goal of the IT modernization project** is to provide a low power technology solution to each Branch Postmaster (BPM) which will enable each of approximately 1.29 Lakhs Branch Post Offices (BOs) to improve the level of services being offered to rural customers across all the states.

**Background:**

So far, 43,171 Branch Post Offices have migrated under the “DARPAN” project with the aim of financial inclusion to rural population and it is targeted to complete the project by March, 2018.

**Significance of the project:**

The Project shall increase the rural reach of the Department of Posts and enable BOs to increase traffic of all financial remittances, savings accounts, Rural Postal Life Insurance, and Cash Certificates; improve mail operations processes by allowing for automated booking and delivery of accountable article; increase revenue using retail post business; provide third party applications; and make disbursements for social security schemes such as MGNREGS.

Sources: pib.

## Vahan

**What is it?**

‘Vahan’ is the name of the national vehicle registry, which intends to collate all the information available with road transport authorities for easy access by both citizens and regulators. Data available with over 90% of all road transport authorities including RTOs and district transport offices have been computerised so far. As a result, Vahan now contains about 21.68 crore vehicle records in its repository.

**What is it for?**

Vahan allows access to all details related to vehicles such as registration number, chassis/engine number, body/fuel type, colour, manufacturer and model and provides various online services to citizens. Driving Licence and related data are automated through a separate application called ‘Sarathi’.



**Why is it important?**

- Vahan has been designed to capture all the information mandated by the Central Motor Vehicle Act 1988 as well as State Motor Vehicle Rules. It has been customised to suit the varied requirements of all States and Union Territories. This way, the system ensures access to such information from anywhere. Besides, centralisation of data through the creation of the State and National Registries under Vahan also helps address the needs of RTOs, police and motor insurers.
- The Police Department will also have access to the registry. The information available online can help in resolving crimes such as theft of vehicles and usage of fake registration numbers. Traffic-check points can cross-check the validity of the documents such as licences presented by motorists through hand-held devices. Enforcement activities such as issue of challan and settlement of penalty amount can also be carried out through Vahan. Banks, which may have given out loans for vehicle purchases, will also have access to the National/State Registry to track the status of vehicles under lien.
- Lately, motor insurance companies have also been encouraged to upload data of insured vehicles on Vahan. When the process is completed, it will help in tracking vehicles that have not obtained an insurance cover or vehicles that have not renewed their covers.

**Benefits:**

With Vahan, multiple visits to the RTO, extensive paperwork, queues, middlemen and bribes, all of which are today a part of package if you own a vehicle, will be a thing of the past. Vahan helps carry out most of the RTO related transactions including payments, online. Other services such as transfer of ownership, change of address, issue and renewal of permits and fitness certificates are also available at the click of the mouse. The need for 'No objection certificate' for transfers will be eliminated since all RTOs will have access to the centralised data.

Sources: the hindu.

## electronic - Human Resource Management System (e-HRMS)

**Context:** The government has launched electronic-Human Resource Management System (e-HRMS) for central government employees.

**About e- HRMS:**

**What is it?** It is an online platform for central government employees to apply for leave and access their service-related information.

**Benefits for employees:** With launch of e-HRMS, employees will be able to not only see all their details with respect to service book, leave, GPF, salary, etc. but also apply for different kind of claims/reimbursements, loan/advances, leave, leave encashment, LTC advances, tour etc. on a single platform. They will also be able to track status and match details instantly.

**Benefits for the government:** Availability of centralized data will enable Government for policy research and planning as such educational qualifications and other competencies and deficiencies may be easily obtained. It will enable Government to take transfer and posting decisions more pragmatically based on reliable first hand data.



Sources: pib.

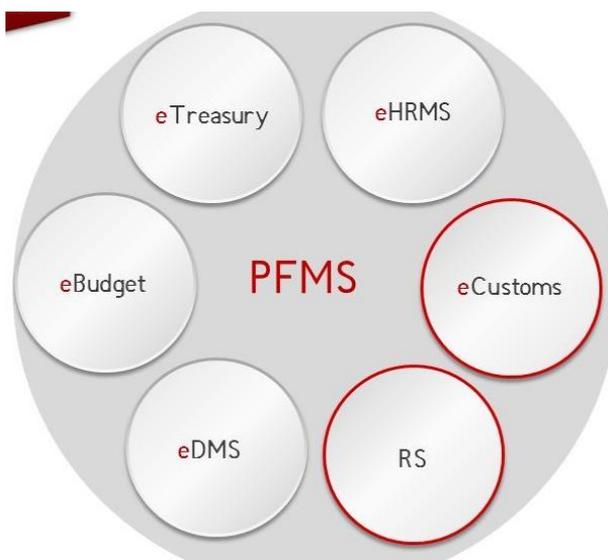
## Public Financial Management System (PFMS)

**Context:** The home ministry has directed all NGOs, business entities and individuals who receive funds from abroad to open accounts in any of the 32 designated banks, including one foreign, within a month for higher level of transparency. It also asked them to ensure that such funds are not utilised for activities detrimental to the national interest.

The directive to the NGOs, companies and individuals to open foreign contribution accounts in banks, which are integrated with the central government's Public Financial Management System (PFMS), came for providing a higher level of transparency and hassle-free reporting compliance.

### Background:

The Foreign Contribution (Regulation) Act 2010 provides for the regulation of acceptance of the foreign funds or foreign hospitality by certain individuals, associations, organisations and companies "to ensure that such contributions or hospitality is not being utilised for the activities detrimental to the national interest".



### About PFMS:

**What is it?** The PFMS, which functions under the Controller General of Accounts in the Ministry of Finance, provides a financial management platform for all plan schemes, a database of all recipient agencies, integration with core banking solution of banks handling plan funds, integration with state treasuries and efficient and effective tracking of fund flow to the lowest level of implementation for plan scheme of the government.

**Significance of PFMS:** Introduction of the PFMS resulted in effectiveness and economy in public finance management through better cash management for government transparency in public expenditure and real-time information on resource availability and utilisation across schemes. It also resulted in improved programme administration and management, reduction of float in the system, direct payment to beneficiaries and greater transparency and accountability in the use of public funds.

Sources: the hindu.

## Fiber grid project

**Context:** President Ram Nath Kovind recently dedicated the Andhra Pradesh Fibre Grid project which aims to provide on-demand affordable broadband connectivity.

### About the Fiber Grid Project:

- The project, in partnership with the government of India and the private sector, will provide internet speeds of 10 Mbps for all households and 1-10 Gbps for all institutions by 2018.
- The AP Fibre Grid was conceptualised to provide high-speed internet service to every household in the state at a nominal rate. The project, when completed by 2019, will cover over one crore households, 50,000 schools and educational institutions, all government offices, over 5,000 government hospitals and health centres and all panchayat offices.
- Andhra Pradesh State Fibernet Limited (APSFL), which is implementing the AP Fiber Grid project, will provide three services at tariffs starting as low as ₹149 for 5 GB data, along with 250-odd TV channels and a free telephone connection.
- Called triple play services, it includes broadband of 15 Mbps to households and 100 Mbps to 1 Gbps connection to government offices and corporates, IPTV offerings 250-odd channels and free telephone connection with no rentals and calls fee within fibre grid network.
- The fibre grid will also offer services like video-conferencing and movies on demand. The district command control centres, all public CCTVs, the AP State Wide Area Network will be integrated into the grid.

**Significance of the project:**

The project is expected to boost digital literacy and skill development in the state, and provide citizen services on a digital platform to every household. It is also expected to facilitate setting up BPOs or call centres in rural areas.

Sources: the hindu.

*Paper 2 Topic: India and its neighbourhood- relations.*

## Pact on Rohingya

**Context:** Bangladesh and Myanmar recently signed a Memorandum of Agreement to begin the repatriation of more than 6,20,000 Rohingya refugees who have fled to Bangladesh in the past few months. Further, a joint working group including officials from Bangladesh, Myanmar and the United Nations High Commission for Refugees (UNHCR) will be set up in three weeks, and Myanmar would begin to repatriate the refugees within two months, by January 23, 2018.

**What had led to the exodus?**

Since August, when the Myanmar military began a crackdown on Rohingya villages in Rakhine after a series of terror strikes on army camps, the numbers that have escaped burning homes and alleged atrocities by the authorities, have risen rapidly, with most seeking shelter across the border in Kutupalong camp of Bangladesh's Cox's Bazaar. The UN has condemned the violence as a case of "ethnic cleansing" and "genocide", putting pressure on Myanmar's leadership to end it.

**How did China help?**

Talks between Bangladesh and Myanmar appear to have been guided not by international agencies, but by China. China had announced that it favoured a "three-step" solution, comprising a ceasefire in Rakhine, a bilateral repatriation deal for the Rohingya to Myanmar and long-term solutions including the economic development of the Rohingya areas.

**Why is China interested?**

- Beijing has deep interests in Rakhine, especially in the Kyaukpyu Port, with oil and energy pipelines to Yunnan province forming part of a \$10 billion economic zone in its Belt and Road Initiative.
- While on the one hand, China has protected the Myanmar regime from international sanctions at the UN thus far, it has tied itself to the success or failure of the repatriation agreement, on which the fate of the Rohingya now rests.

**Way ahead:**

According to the deal, Myanmar has committed not to delay sending those repatriated back to their original homes, but this task will be made more difficult by the fact that many of the Rohingya villages have been burnt down. Also of concern is the stipulation that those who will be accepted by Myanmar must show their Myanmar-issued identity cards, not just their Bangladesh-issued refugee cards. Finally, international human rights agencies have warned that refugees cannot be forced to return while the threat of violence against them persists, even as they process the trauma borne of the atrocities they fled from.

Sources: the hindu.

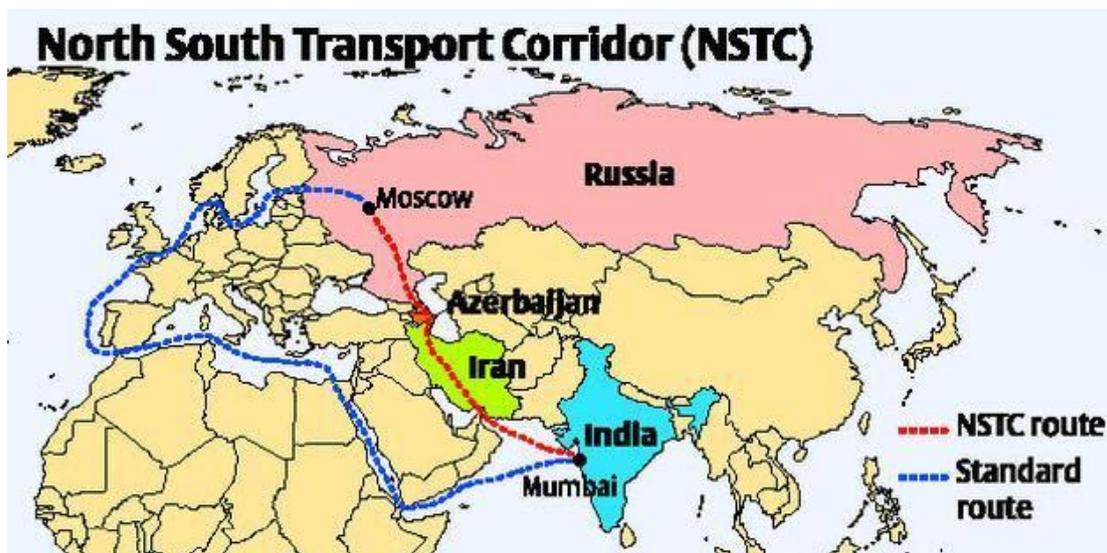
## INSTC

**Context:** The International North South Transportation Corridor (INSTC) connecting Mumbai with St Petersburg and beyond – which has been 17 years in the making – is set to be operationalised from the middle of next month with the first consignment from India to Russia.

**About INSTC:**

What is it? India, Iran and Russia had in September 2000 signed the INSTC agreement to build a corridor to provide the shortest multi-modal transportation route linking the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran and St Petersburg. From St Petersburg, North Europe is within easy reach via the Russian Federation. The estimated capacity of the corridor is 20-30 million tonnes of goods per year.

**The route primarily involves** moving freight from India, Iran, Azerbaijan and Russia via ship, rail and road. The objective of the corridor is to increase trade connectivity between major cities such as Mumbai, Moscow, Tehran, Baku, Bandar Abbas, Astrakhan, Bandar Anzali and etc.



**Significance of the corridor:** Conceived well before China's Belt and Road Initiative (BRI), INSTC will not only help cut down on costs and time taken for transfer of goods from India to Russia and Europe via Iran but also provide an alternative connectivity initiative to countries in the Eurasian region. It will be India's second corridor after the Chabahar Port to access resource rich Central Asia and its market.

#### **Background:**

The absence of viable surface transport connectivity is a serious impediment to trade with the Eurasian region. Currently, transport of goods between India and Russia mostly takes place through the sea route via Rotterdam to St Petersburg. In the case of the Central Asian region, goods are routed through China, Europe or Iran. The routes through China and Europe are long, expensive and time-consuming. Therefore, there is a need to have a logistics route that would be shorter, cheaper and faster.

Sources: the hindu.

## International Solar Alliance

With 19 countries ratifying its framework agreement, the International Solar Alliance (ISA) has become the first treaty-based international government organisation to be based in India.

#### **Significance of this event:**

This marks the culmination of India's efforts, which had taken a lead role in setting up the ISA—an alliance of 121 sunshine countries situated between the Tropics of Cancer and Capricorn. ISA also signals that New Delhi would employ it as a foreign policy tool to cement its leadership among developing countries.

#### **Facts for Prelims:**

- The ISA now has become a treaty based inter-governmental international organisation and it will be recognized by UN legally to become fully functional.
- Guinea became the 15<sup>th</sup> country to ratify this agreement.
- Other prominent intergovernmental organisations in the energy sector include the Vienna-based Organisation of the Petroleum Exporting Countries (Opec) and Paris-based International Energy Agency (IEA).

#### **About ISA:**

The ISA is an Indian initiative, jointly launched by the Prime Minister Narendra Modi and the president of France on 30 November 2015 in Paris, on the sidelines of COP-21, the UN climate conference. It aims at addressing obstacles to deployment at scale of solar energy through better harmonization and aggregation of demand from solar rich countries lying fully or partially between the tropics of Cancer and Capricorn.

- The ISA, headquartered in India, has its secretariat located in the campus of the National Institute of Solar Energy, Gurgaon, Haryana.
- The Paris Declaration, establishing the ISA, states that the countries share the collective ambition to undertake innovative and concerted efforts for reducing the cost of finance and cost of technology for immediate deployment solar generation assets.

Sources: pib.

## ASEAN-India Connectivity Summit (AICS)

Keeping with India's initiative of connectivity with southeast Asia under its Act East Policy, New Delhi is hosting an Asean-India Connectivity Summit (AICS) on the theme "Powering Digital and Physical Linkages for Asia in the 21st Century".

### About AICS:

**Aim:** The AICS aims to accelerate existing connectivity prospects, identify issues of concern, evolve suitable policy recommendations and develop strategies to enhance economic, industrial and trade relations between ASEAN and India.

**Its focus areas** are infrastructure, roadways, shipping, digital, finance, energy and aviation.

**Participants:** The AICS would be bringing together policymakers, senior officials from the government, investors, industry leaders, representatives of trade associations and entrepreneurs on the same platform.

### About ASEAN:

The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand. At present there are 10 members namely, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam.

Sources: the hindu.



## India, Australia call for 'open' Asia-Pacific zone

### Context:

India and Australia highlighted the need to maintain the Asia-Pacific region as a "free" and "open" zone under recently held the "2+2" dialogue model which includes the foreign and defense secretaries of both sides. The discussion was the first meeting of this level since the two sides participated in the quadrilateral discussion for a new strategic partnership targeting the Asia-Pacific region.

### Need to maintain the Asia-Pacific region as a free and open zone:

A free, open, prosperous and inclusive Indo-Pacific region serves the long-term interests of all countries in the region and of the world at large. Besides, there is a growing convergence of strategic perspectives between the India and Australia.

### Way ahead:

Asia's third largest economy, India – remains on the outside of the APEC grouping despite a membership request dating back more than 20 years. India in APEC would help offset the now-



overwhelming influence of the Chinese economy, while also embedding India in a forum that would nudge it toward further economic reform.

Sources: the hindu.

## Hambantota port

**Context:** Sri Lanka has formally handed over its southern port of Hambantota to China on a 99-year lease, which government critics have denounced as an erosion of the country's sovereignty.

### Background:

Sri Lanka, in July 2017, cleared a revised deal for the Chinese-built port in Hambantota. The modified agreement is believed to be more profitable to Sri Lanka and also addresses security concerns raised by other countries. As per the deal, while the Chinese would manage port operations, no naval ship, including Chinese ones, can call at Hambantota without Sri Lanka's permission.

### Significance of Hambantota port for China:

Hambantota is right in the middle of vital energy supply lines in the Indian Ocean, connecting the Middle East and East Asia. For Beijing, the Hambantota project is a linchpin of the "One Belt One Road" project, which aims to build a new Silk Road of trade routes between China and more than 60 countries in Asia, the Middle East, Africa and Europe. That project is underpinned by a network of harbours across the world that have put China in a position to challenge the US as the world's most important maritime superpower. Other similar developments in the region include the Gwadar port in Pakistan, which is the centrepiece of the \$55bn China-Pakistan Economic Corridor.



NOGA AMI-RAV/Stars and Stripes

### Why is India concerned?

Hambantota, which sits on Sri Lanka's southern coast, provides access to critical Indian Ocean sea lanes. The acquisition of the port by China has spurred particular alarm in India, which is concerned about Beijing's growing strategic and economic footprint in the Indian Ocean region.

Sources: the hindu.

## 'Ekuverin'

### What is it?

It is a joint military exercise between India and Maldives. The eighth edition of the exercise is being held in Belagavi, Karnataka.

### Key facts:

- The bilateral annual exercise is a 14-day joint military training between the Indian Army and the Maldives National Defence Force (MNDF), which is held alternatively in India and Maldives since 2009. The seventh edition of the exercise was held at Kadhdhoo, Lammu Atoll, Maldives in December, 2016.
- The focus of the exercise is to acquaint both armies with each other's operating procedures in the backdrop of a counter-insurgency or counter-terrorist operations in an urban or semi-urban environment under the United Nations (UN) Charter, with an overall aim to enhance interoperability between the two armies.
- 'Ekuverin' means 'friends' in the Maldivian language.

Sources: the hindu.

## Ujh Project

**Context:** In a bid to fast track utilization of India's rights under Indus Waters Treaty, the DPR of Ujh Project was recently submitted by Central Water Commission to the Jammu & Kashmir government. The DPR will help India to utilize a part of the flow that presently goes across border unutilized.

**About the Ujh project:**

The Ujh project is a step towards India's utilisation of waters of the Indus and its tributaries in keeping with its rights under the treaty. The project, which is to come up in Kathua district, will store around 0.65 million acre feet (MAF) of water from Ujh (a tributary of Ravi) to irrigate 30,000 hectares and produce over 200 MW of power.

**About the Indus water treaty:**

Signed in 1960 by then Prime Minister Jawaharlal Nehru and then Pakistan President Ayub Khan, the treaty allocates 80% of water from the six-river Indus water system to Pakistan. Under the treaty, control over six north Indian rivers were divided between the two countries. India got control over the rivers Beas, Ravi and Sutlej whereas Pakistan got control over Indus, Chenab and Jhelum.

**Unique features of the treaty:**

Involvement of the third party: This is a unique treaty involving a third party. It was brokered by the World Bank.

Permanent commission: A Permanent Indus Commission was set up as a bilateral commission to implement and manage the Treaty. The Commission solves disputes arising over water sharing.

Arbitration mechanism: The Treaty also provides arbitration mechanism to solve disputes amicably.

Sources: the hindu.

**Paper 2 Topic:** *Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.*

## BIMSTEC Coastal Shipping Agreement

**Context:** Member States of BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) recently met in New Delhi to discuss modalities for promoting coastal shipping in the region. In this first meeting of the Working Group member countries discussed the draft text of BIMSTEC Coastal Shipping Agreement drafted by the Ministry of Shipping, Government of India.

The meeting of the Working Group is a follow up of the BIMSTEC leaders' call at the Retreat hosted by Prime Minister Shri Narendra Modi in Goa in October 2016, to enhance connectivity in the region.

**About the Coastal Shipping Agreement:**

The objective of the above agreement is to facilitate coastal shipping in the region, thereby giving a boost to trade between the member countries.

- The agreement would apply to coastal shipping, that is shipping within 20 nautical miles of the coastline. The requirements for movement of vessels in this part of the sea are different from standard requirements of deep sea shipping.
- Coastal ship movements require smaller vessels and lesser draft, and therefore, involve lower costs. Once the agreement is ratified by the member countries and becomes operational, a lot of cargo movement between the member countries can be done through the cost effective, environment friendly and faster coastal shipping route.

### BIMSTEC's Key Achievements

- Identified priorities on **infrastructure and connectivity** in regions
- Finalized the MoU on **Trans Grid Connectivity**.
- Operationalization of **BIMSTEC Energy Centre** in Bangaluru
- **BIMSTEC Free Trade Area** [2004], progress is being consciously made.
- Signed BIMSTEC Convention on **Suppression of terrorism** [2009]
- Finalized Convention on **MLA** in Criminal Matters
- Conventions on **Trafficking in Persons, TSP and Extradition** in-progress
- **BTILS**

**What you need to know about BIMSTEC?**

BIMSTEC or the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation is a regional organisation which comprises of seven member states which lie near the Bay of Bengal.

- This sub-regional organisation was started on June 6, in the year 1997 through a Bangkok Declaration.

- BIMSTEC consists of seven countries: 5 come from South Asia, including India, Nepal, Bangladesh, Bhutan, and Sri Lanka; and 2 come from Southeast Asia, which includes Myanmar and Thailand.
- BIMSTEC headquarters are situated in Dhaka, Bangladesh.
- The whole region which constitutes the BIMSTEC is home to over 1.5 billion people. The population counts for around 22 percent of the total world population. These countries have a combined GDP of \$2.7 trillion.

Sources: pib.

## UN's Global Compact on Migration

**Context:** The administration of President Donald Trump has withdrawn the United States from the United Nations pact to improve the handling of migrant and refugee situations, deeming it "inconsistent" with its policies.

The US has been a part of the non-binding New York Declaration for Refugees and Migrants since it was unanimously adopted by the UN General Assembly last year.

### **Why has the US withdrawn?**

The United States says the pact undermines the sovereign right of the country to enforce immigration laws and secure its borders. Therefore, it undermines the national sovereignty. However, the country has assured its support to international cooperation on migration issues.

### **Implications of this move:**

It is widely believed that no one nation can manage international migration alone. Besides, the role of the United States in this process is critical as it has historically and generously welcomed people from all across the globe and remains home to the largest number of international migrants in the world.

### **UN compact on Migration:**

The global compact for migration is the first, intergovernmentally negotiated agreement, prepared under the auspices of the United Nations, to cover all dimensions of international migration in a holistic and comprehensive manner.

In the New York Declaration for Refugees and Migrants, adopted in September 2016, the General Assembly decided to develop a global compact for safe, orderly and regular migration.

The global compact is a significant opportunity to improve the governance on migration, to address the challenges associated with today's migration, and to strengthen the contribution of migrants and migration to sustainable development.

The global compact is framed consistent with target 10.7 of the 2030 Agenda for Sustainable Development in which member States committed to cooperate internationally to facilitate safe, orderly and regular migration and its scope is defined in Annex II of the New York Declaration. It is intended to:

- Address all aspects of international migration, including the humanitarian, developmental, human rights-related and other aspects.
- Make an important contribution to global governance and enhance coordination on international migration.
- Present a framework for comprehensive international cooperation on migrants and human mobility.
- Set out a range of actionable commitments, means of implementation and a framework for follow-up and review among Member States regarding international migration in all its dimensions.
- Be guided by the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda.
- Be informed by the Declaration of the 2013 High-Level Dialogue on International Migration and Development.

### **Way ahead:**

The conclusion of the UN Global Compact on Migration in 2018 could go a long way towards improving the management and governance of international migration, or give nations an excuse to make things worse.

Sources: the hindu.

## Wassenaar Arrangement

### Context:

In a significant development, elite export control regime Wassenaar Arrangement (WA) has decided to admit India as its new member, which is expected to raise New Delhi's stature in the field of non-proliferation besides helping it acquire critical technologies. The decision was taken at the recently held plenary meeting of the grouping in Vienna.

### About Wassenaar arrangement:

The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, commonly known as the Wassenaar Arrangement, is a multilateral export control regime established to ensure regional and international security and stability promoting transparency in transfer of arms and dual-use goods and technologies.

**What do the participating nations do?** The participating nations make sure that the export of ammunition does not contribute to the development or enhancement of military capabilities undermining regional security. In order to achieve the aim of stable defence deals, the participatory nations apply export controls to all items listed in the List of Dual-Use Goods and Technologies and the Munitions List.

### How will this membership help India?

- India's entry into the export control regime would enhance its credentials in the field of non-proliferation despite not being a signatory to the Non-Proliferation Treaty (NPT).
- The WA membership is also expected to build up a strong case for India's entry into the 48-member Nuclear Suppliers Group (NSG).
- Further, since India has low reserves of uranium required for its civil nuclear energy programmes, the country entry to the Export Control regimes will help secure the supply of nuclear fuel more easily.

Sources: ET.

### Wassenaar Arrangement

- The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Good and Technologies ("Wassenaar Arrangement")
- First global multilateral arrangement on export controls for conventional weapons and sensitive dual-use goods and technologies

## Ajeya Warrior 2017

### What is it?

Ajeya Warrior is a joint exercise between the **Indian Army** and **Royal British Army**. The Exercise is held once in two years, alternatively in India and the UK. The 3<sup>rd</sup> edition of this joint military exercise is being held in Rajasthan.

**The aim of the Exercise** is "to build and promote positive military relations between Indian and UK Army and to enhance their ability and interoperability to undertake joint tactical level operations in Counter Insurgency/Counter Terrorism Environment under United Nations Charter". The exercise further focuses on enhancing and exchanging skills and experience between the Indian Army and the Royal British Army.



Sources: the hindu.

## Sendai Framework

**Context:** National Disaster Management Authority (NDMA) is conducting the first national-level Training of Trainers programme to sensitise various Central Ministries and Departments on utilisation of Sendai Monitor for developing action plans for Disaster Risk Reduction (DRR).

The programme is being organised by the National Disaster Management Authority (NDMA) in collaboration with the United Nations Office for Disaster Risk Reduction-Global Education and Training Institute (UNISDR-GETI).

**Need for training:**

This training programme will build the capacity of the participants to utilise defined indicators to monitor the progress of the Sendai targets. Training modules at the programme will also enable them to lead consultations and train others on the monitoring of the Sendai Framework Targets.

**Background:**

In June 2016, India became one of the first countries to align its National Disaster Management Plan (NDMP) with the SFDRR, which clearly identifies regional, national and local targets along with short, medium and long-term timelines. Various activities are being undertaken across the country to achieve the targets identified in the SFDRR.

**About the Sendai Framework:**

What is it? The Sendai Framework for Disaster Risk Reduction (SFDRR), 2015-2030, is the first major agreement of the post-2015 development agenda and identifies targets and priority actions towards reducing disaster risks and implementing development that is both resilient and sustainable. The Sendai Framework is a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

**The Seven Global Targets:**

- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

**The Four Priorities for Action under the Framework:**

- Understanding disaster risk.
- Strengthening disaster risk governance to manage disaster risk.
- Investing in disaster risk reduction for resilience.
- Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Sources: pib.



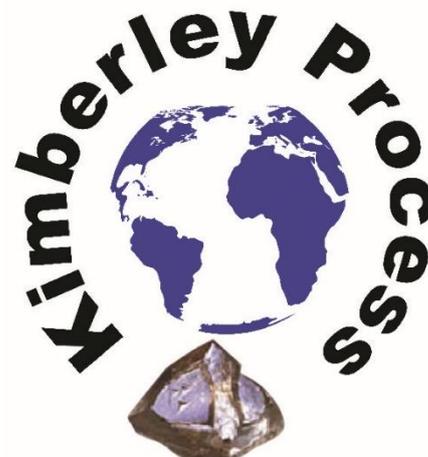
## Kimberley Process

**Context:** The KP Plenary Session is being held at Brisbane, Australia. In one of the landmark decisions favoring India's leading position in Diamonds globally, India was appointed as the Kimberley Process (KP) Vice Chair for 2018 & Chair for 2019 in the last plenary held in Dubai in November, 2016. The EU will be KP Chair for 2018.

### About Kimberley process:

#### What is the Kimberley Process?

The Kimberley Process is an international certification scheme that regulates trade in rough diamonds. It aims to prevent the flow of conflict diamonds, while helping to protect legitimate trade in rough diamonds. The Kimberley Process Certification Scheme (KPCS) outlines the rules that govern the trade in rough diamonds. The KPCS has developed a set of minimum requirements that each participant must meet. The KP is not, strictly speaking, an international organization- it has no permanent offices or permanent staff. It relies on the contributions – under the principle of 'burden-sharing' – of participants, supported by industry and civil society observers. Neither can the KP be considered as an international agreement from a legal perspective, as it is implemented through the national legislations of its participants.



**What are Conflict diamonds?** "Conflict Diamonds" means rough diamonds used by rebel movements or their allies to finance conflict aimed at undermining legitimate governments. It is also described in the United Nations Security Council (UNSC) resolutions.

#### Who is involved?

The Kimberley Process (KP) is open to all countries that are willing and able to implement its requirements. The KP has 54 participants, representing 81 countries, with the European Union and its Member States counting as a single participant. KP members account for approximately 99.8% of the global production of rough diamonds. In addition, the World Diamond Council, representing the international diamond industry, and civil society organisations, such as Partnership-Africa Canada, participate in the KP and have played a major role since its outset.

#### How does the Kimberley Process work?

The Kimberley Process Certification Scheme (KPCS) imposes extensive requirements on its members to enable them to certify shipments of rough diamonds as 'conflict-free' and prevent conflict diamonds from entering the legitimate trade. Under the terms of the KPCS, participating states must meet 'minimum requirements' and must put in place national legislation and institutions; export, import and internal controls; and also commit to transparency and the exchange of statistical data. Participants can only legally trade with other participants who have also met the minimum requirements of the scheme, and international shipments of rough diamonds must be accompanied by a KP certificate guaranteeing that they are conflict-free.

Sources: pib.

## India-Swiss deal inked on data sharing

### Context:

In a move aimed at combating black money stashed abroad, India has signed an agreement with Switzerland that would allow automatic sharing of tax-related information from January 1 next year.

### Present scenario:

So far, India had to ask Switzerland for specific bits of information by proving that a valid inquiry was on against the account holder. The Swiss could delay or deny the information altogether.

### Background:

- A joint declaration for the implementation of Automatic Exchange of Information (AEOI) was signed last month between the two sides here and it provided that both countries would start collecting data in accordance with the global standards in 2018 and exchange it from 2019 onwards. The AEOI conforms to a norm set by global economic body the Organisation for Economic Co-operation and Development (OECD) for tax transparency.

- While Switzerland has conformed to the global standards on automatic exchange of information with the signing of the declaration, India, on its part, has promised to safeguard the confidentiality of the data.

#### Significance of this move:

Confidentiality and data protection requirements are to be strictly followed under the automatic information exchange framework. This process ensures the signatory always maintains control over its exchange partners and the treatment of the data exchanged, as per OECD. The automatic exchange of information will also discourage Indians from stashing black money in Swiss banks. Indian deposits in Swiss banks have been falling already.

#### What necessitated this move?

Switzerland, which has always been at the centre of the debate on black money allegedly stashed by Indians abroad, used to be known for very strong secrecy walls till a few years ago around its banking practices. A huge global pressure has resulted in Switzerland relenting on the tough secrecy clauses its local laws gave to the banks.

#### Way ahead:

Though the deal will do little by way of bringing back black money from Swiss accounts, it will have a deterrent effect. The black money hoarders will be under pressure with one big safe haven gone off their list.

Sources: the hindu.

## India inks pact to restore normalcy in Rakhine

### **Context:**

India will provide Myanmar with \$25 million for development projects including prefabricated houses in troubled Rakhine state to enable the return of Rohingya Muslims who have fled the area. A memorandum of understanding to support development of Rakhine and help create jobs was recently signed.

- This support is intended to help the Government of Myanmar achieve its objective of restoration of normalcy in Rakhine State and enable the return of displaced persons.
- Under this MoU, Government of India proposes to take up, among others, a project to build prefabricated housing in Rakhine State so as to meet the immediate needs of returning people. Besides housing, the proposals include building schools, healthcare facilities and building bridges and roads.

### **Background:**

- More than 600,000 Rohingya have escaped to Bangladesh after attacks by insurgents on Myanmar security forces in August triggered a military crackdown that the United Nations has called ethnic cleansing. The international community demands the Rohingya be allowed to go home in safety, and Bangladesh and Myanmar have begun talks on repatriation, but huge doubts remain about the Rohingya ever being able to return in peace to rebuild homes and till fields.
- India, which is concerned about the influx of the refugees into its territory, has stressed economic development of the Rakhine region as a way to help lower tensions.

### **Assistance to Myanmar:**

India has been trying to promote economic cooperation with Myanmar to try to push back against China's expansive involvement in infrastructure development across south Asia. Beijing has also stepped into the Rohingya crisis and proposed a three-phase plan including a ceasefire, bilateral talks and then tackling poverty long-term.

### **Way ahead:**

India's task will depend on how the Myanmar government facilitates the development work. Indian officials have drawn up a detailed plan in the past couple of months. Indian policymakers felt they had to move fast after it became apparent that the Rohingya crisis was pushing the West into its default mode of condemnation and sanctions against Myanmar which India believes to be counter-productive.

Sources: the hindu.

*Paper 2 Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.*

## US recognizes Jerusalem as Israel's capital

In a major announcement, United States President Donald Trump has officially recognized Jerusalem as the capital of Israel night and has directed the State Department to initiate the process of moving the American embassy from Tel Aviv to Jerusalem, which many Arab leaders warn can trigger an upheaval in the already volatile Middle East. Israel considers the "complete and united Jerusalem" its capital, but Palestinians claim East Jerusalem for the capital of their future state.

### **What is the international status of Jerusalem?**

The walled Old City of Jerusalem, at just one square kilometer, is home to sites that are among the holiest in Judaism, Christianity, and Islam. Because of its unique cultural and religious significance, the UN General Assembly set aside Jerusalem to be a corpus separatum, or separated body, under UN trusteeship when it voted in 1947 to divide the British mandate of Palestine into two states, an Arab one and a Jewish one.

That position remained the international consensus even after the partition plan itself was preempted by Israel's declaration of independence in 1948 and the subsequent invasion by Arab powers. An armistice the following year divided the mandate along what has become known as the Green Line, which cuts through the middle of Jerusalem. Israel established its seat of government in the western half of the city, while, across a no man's land lined with barbed wire, Jordan took control of the city's eastern half, including the Old City.

Israel captured East Jerusalem in 1967 and subsequently annexed it, redrawing its municipal borders to include surrounding Arab villages. In 1980, Israel's parliament, the Knesset, designated the united city as Israel's capital. By contrast, the West Bank, also captured in 1967, was not annexed; it remains under military occupation and Palestinians have partial self-government there, through the Palestinian Authority (PA). While Israel controls the city, the Oslo Accords, signed by Israel and the Palestine Liberation Organization (PLO) in 1993, stipulated that Jerusalem's disposition would only be decided on in permanent-status negotiations between the parties. Other major issues under negotiation concern refugees' right of return, security arrangements, borders, and mutual recognition.

### **Who lives in Jerusalem?**

Jerusalem is home to nearly one million residents. West Jerusalem's population of some 330,000 is almost entirely Jewish. The eastern half of the city, which comprises the Old City, Palestinian neighborhoods, and refugee camps, along with some newer Jewish settlements, is home to about 320,000 Arabs and 212,000 Jews. Unlike Palestinians who live elsewhere in Israel, most Palestinian East Jerusalemites have permanent residency, but not citizenship, since they do not recognize Israeli sovereignty over the city.

### **How have other countries reacted?**

The Islamic world is outraged. Palestinian President Mahmoud Abbas has warned of "dangerous consequences", Jordan's King Abdullah II and Saudi King Salman have cautioned the US, Turkey has threatened to cut ties with Israel, Iran has declared that "the Palestinian nation will achieve victory", China has said it "could sharpen regional conflict", Egypt, the Arab League and several European nations have expressed grave reservations, and the Pope has pleaded for status quo. Hamas has threatened an intifada, and Hezbollah could react aggressively. India, friends with both Palestine and Israel, could face a quandary.

### **Way ahead:**

Trump's announcement is likely to compound a broader crisis of confidence among Palestinians that President Mahmoud Abbas, who has been in office for many years beyond his electoral mandate, can deliver statehood. Fatah and Hamas have called for protest.



Sources: the hindu.

## WORLD MIGRATION REPORT 2018

**Context:** WORLD MIGRATION REPORT 2018 has been released. This World Migration Report 2018 is the ninth in the series. Since 2000, International Organization for Migration has been producing world migration reports to contribute to increased understanding of migration throughout the world.

### **Who are International migrants?**

The definition of international migrants used in the report is broad, taking into account anyone living in a country other than their own and includes refugees and economic migrants, both those immigrating officially and those who do so “irregularly”. The numbers are not a count of people by national origin or ethnicity and, therefore, do not include children of migrants born in the countries their parents went to.

### **Highlights of the Report:**

- Indian tops the world in the number of migrants sent abroad. About 16.59 million Indian live abroad. Mexico sent out 13 million migrants, the second highest number.
- The United Arab Emirates has the largest number of Indian migrants, who number 3.31 million, up from 978,992 in 2000, followed by the US with 2.3 million, up from 1.04 million.
- The number of migrant from other countries living in India is 5.2 million, a fall of 1.22 million from 2000.
- In Europe, there are 1.3 million people from India. Britain has most of them. Canada now has 602,144 people from India, an increase from 319,138 in 2000. Australia showed a huge jump of more than four times, from 90,719 people from India in 2000 to 408,880 now.
- Most of the international migration takes place among developing countries with 60% of the migrants from Asia going to other Asian countries. About \$400 billion is sent to developing countries by migrants and the remittances are used to finance education, housing and other activities that promote development.

### **Way ahead:**

In the current political climate, “migration has become a toxic” topic. As a result, migrating is a problem for those outside the “global elite” made up of professionals who can move easily to other countries. Therefore, there is need for policies to take care of the migrants who do not fall in that category.

### **About the International Organization for Migration:**

Established in 1951, IOM is the leading inter-governmental organization in the field of migration and works closely with governmental, intergovernmental and non-governmental partners.

- With 169 member states, a further 8 states holding observer status and offices in over 100 countries, IOM is dedicated to promoting humane and orderly migration for the benefit of all. It does so by providing services and advice to governments and migrants.
- IOM works to help ensure the orderly and humane management of migration, to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.
- IOM activities that cut across these areas include the promotion of international migration law, policy debate and guidance, protection of migrants’ rights, migration health and the gender dimension of migration.

Sources: ET.

## MEA launches SAMEEP

### **Context:**

With an aim to bring foreign policy to the masses the External Affairs Ministry has come up with an initiative – SAMEEP – ‘Students and MEA Engagement Programme’.

### **About SAMEEP:**

The main objective of SAMEEP is to take Indian foreign policy and its global engagements to students across the country.

How it works?

Under this programme, all the ministry officers – under-secretary and above – will be asked to go to their hometowns, particularly their alma maters. They will be expected to interact with the students about the way the MEA works, basic elements of its policies, how diplomacy is conducted, and generally give students an idea of what a career in the MEA would look like.

- The officials will be provided a basic standardised presentation by the ministry, but will be free to add their own improvisations and experiences.
- The agenda of the programme is not only to make students interested and aware of India's place in the world and its global ambitions, but also to drive interest in diplomacy as a career option.

Sources: the hindu.

- **The new programme, SAMEEP,** aims to take Indian foreign policy & its global engagements to students in smaller towns and cities
- The ministry has asked all its officers, under-secretary and above, to **visit their alma mater** when they next go on home leave and engage with students
- The idea is not only to get students to take interest in **India's global ambitions**, but also **consider diplomacy as a career option**
- SAMEEP stands for **Students and MEA Engagement Programme**

## UN imposes new sanctions on North Korea

The UN Security Council has unanimously voted to impose tough new sanctions on North Korea in response to Pyongyang's latest missile test. The restrictions, proposed by the US, are designed to prevent Pyongyang from furthering its nuclear programme. The move was a "significant ramping up" of sanctions against North Korea.

**The sanctions:**

The sanctions include a ban on nearly 90% of refined petroleum exports to North Korea. The resolution also orders North Koreans who work abroad to return to the country within 24 months.

The resolution also contains a commitment to the resumption of "six-party talks", leaving the door open for possible diplomatic negotiations. The six-party talks are a diplomatic effort, which aim to find a peaceful solution to security concerns in the Korean Peninsula. They involve North Korea, South Korea and the US, along with regional powers China, Japan and Russia. The last six-party talks were held in 2009.

**Intentions behind this move:**

The idea is to squeeze North Korea as tightly as possible to reduce its income, reduce its revenues, and in that way hopefully drive it to the negotiating table and also for it to stop its missile development process.

**Background:**

Last month, the US unveiled fresh sanctions against North Korea which it said were designed to limit the funding for its nuclear and ballistic missile programmes. The measures targeted North Korean shipping operations and Chinese companies that trade with Pyongyang.

The UN also approved new sanctions following North Korea's nuclear test on 3 September. These measures restricted oil imports and banned textile exports – an attempt to starve the North of fuel and income for its weapons programmes.

**What necessitated this move?**

North Korean leader Kim Jong-un's government has conducted several missile tests this year, which have drawn condemnation from the international community. Recently, in November 2017, it had successfully conducted a new intercontinental ballistic missile (ICBM) capable of reaching the US mainland. The missile is said to be the "most powerful ICBM" yet to be tested by the country. It was the third test of an ICBM by North Korea this year.



**North Korea's reaction:**

It described the latest UN sanctions "as a violent breach of our republic's sovereignty and an act of war that destroys the peace and stability of the Korean peninsula and a wide region.

Sources: the hindu.

**Paper 2 Topic:** *Important International institutions, agencies and fora, their structure, mandate.*

## International Maritime Council

**Context:** India has been re-elected to the Council of the International Maritime Organization [IMO] under Category "B" at the recently held 30th session of the Assembly of the IMO in London. With re-election in IMO, India will continue to engage with the international maritime community to further her maritime interests and promote the welfare of her citizens.

**Background:**

India has been one of the earliest members of the IMO, having ratified its Convention and joined it as a member-state in the year 1959. India has had the privilege of being elected to and serving the Council of the IMO, ever since it started functioning, and till date, except for two years for the period 1983-1984.

**About IMO:**

The International Maritime Organization – is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.



- It has 171 Member States and three Associate Members.
- The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping and its remit today includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.
- IMO is governed by an assembly of members and is financially administered by a council of members elected from the assembly.
- The IMO's structure comprises the Assembly, the Council, the Maritime Safety Committee, the Marine Environment Protection Committee, the Legal Committee, the Technical Cooperation Committee, and the secretariat, headed by a Secretary-General.

**IMO council:**

The IMO Council acts as the IMO's Governing Body. It has a crucial role to play in deciding various matters in relation to the global shipping industry, including its work programme strategy and budget.

- Members of the Council consist of 40 member states, elected by its Assembly including 10 members in category A with the largest interest in providing international shipping services; 10 members in category B with the largest interest in international seaborne trade and 20 members in category C with special interests in maritime transport or navigation.
- India has been one of the earliest members of the IMO, having ratified its Convention and joined it as a member-state in the year 1959.



Sources: pib.

## Gulf Cooperation Council (GCC)

**Context:** The 38th Gulf Cooperation Council summit is being held in Kuwait. The summit comes at a delicate time after Saudi Arabia, Bahrain, the United Arab Emirates and Egypt all cut ties with Qatar in June, accusing Doha of backing extremism and fostering ties with Iran – charges that Qatar vehemently denies.

Kuwait has played mediator and acted as a conduit for communication between the boycotting countries and Qatar.

**What is GCC?**

The Gulf Cooperation Council (GCC) is a political and economic alliance of six countries in the Arabian Peninsula: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

- Established in 1981, the GCC promotes economic, security, cultural and social cooperation between the six states and holds a summit every year to discuss cooperation and regional affairs.



- Due to their geographic proximity, similar political systems and common sociocultural stances, the immediate goal was for these countries to protect themselves from threats after the Iran-Iraq War.

**Structure:**

The GCC comprises six main branches that carry out various tasks, from the preparation of meetings to the implementation of policies. They are- Supreme Council, Ministerial Council, Secretariat-General, Consultative Commission, Commission for the Settlement of Disputes and the Secretary-General.

**Role of GCC today:**

- Whether the GCC still has a relevant function and role in the region is questionable. Though it was created for the purpose of solidifying union ranks, the blockade imposed on Qatar by its neighbours has largely annulled these principles.
- The Gulf states have in the past differed in their views on several issues that have unfolded in the region over the past two decades. The role of the GCC has also been diminishing ever since the 2003 US-led invasion of Iraq, with the six states illustrating various approaches to the war and its consequences. This has been enhanced during the wave of protests that swept the Middle East in 2011, known as the Arab Spring. Saudi Arabia has gained a dominant role within the GCC today.

Sources: the hindu.

## Asian Harmonization Working Party (AHWP)

**Context:**

The 22nd conference of Asian Harmonization Working Party (AHWP) was recently inaugurated at New Delhi. The conference is being conducted by Central Drugs Standard Control Organization (CDSCO) and National Drug Regulatory Authority (NDRA) of India in collaboration with Ministry of Health & Family Welfare.

**The key objective of the event** is to develop and recommend approaches for the convergence and harmonization of medical device regulations in Asia and beyond and to facilitate the exchange of knowledge and expertise amongst regulators and the industry.

**About AHWP:**

**Asian Harmonization Working Party (AHWP)** was established in **1999** as a voluntary **non-profit organization** of the 30 national regulators of member countries and industry members with a goal to promote regulatory harmonization on medical device regulations in Asia and other regions in accordance with the guidance issued by International Medical Device Regulators Forums (IMDRF). The AHWP works in collaboration with related international organizations such as IMDRF, WHO, International Organization for Standardization (ISO), etc.

Sources: pib.

## UN Peace keeping

**Context:** The opening ceremony of the Indian UN Peace Keeping Training by Mobile Training Team of CUNPK was recently conducted at the Vietnamese Centre for Peace Keeping located at Thaach Hon, Hanoi. The ceremony was attended by the Indian Mobile Training Team (MTT). This is in the furtherance to the ongoing training assistance being extended to the Vietnamese Centre for Peace Keeping by the Centre for UN Peace Keeping, New Delhi (CUNPK).

### Background:

The need for prospective peace keepers to be well trained before deployment in the mission area is a pre requisite for effective peace keeping. Towards this end, the vast experience gained by the Indian Defence Forces would be of great assistance to the Vietnam People's Army.

### What you need to know about UN Peacekeeping?

United Nations Peacekeeping was created in 1948. Its first mission involved the establishment of the UN Truce Supervision Organization (UNTSO), which served to observe and maintain ceasefire during the 1948 Arab-Israeli War.

- UN Peacekeeping maintains three basic principles: Consent of the parties, impartiality and non-use of Force except in self-defence and defence of the mandate.
- The UN Peacekeepers are led by the Department of Peacekeeping Operations (DKPO). There are currently 17 UN peace operations deployed on four continents.
- UN Peacekeepers are from diverse backgrounds, from areas all around the world. They include police, military and civilian personnel. They are often referred to as Blue Berets or Blue Helmets because of their light blue berets or helmets.
- The UN Peacekeeping Force won the Nobel Peace Prize in 1988.
- The United Nations Charter gives the United Nations Security Council the power and responsibility to take collective action to maintain international peace and security. For this reason, the international community usually looks to the Security Council to authorize peacekeeping operations.

Sources: pib.

## Nuclear Suppliers Group (NSG) membership

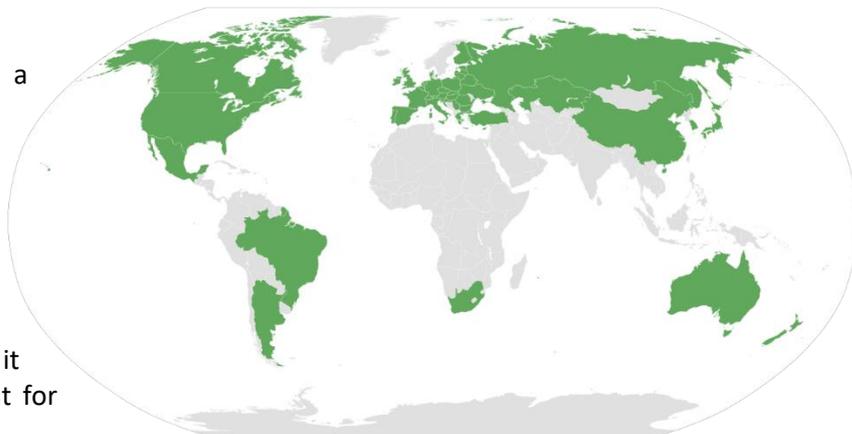
### Context:

Even as China continues to stall India's Nuclear Suppliers Group (NSG) membership, Russia has come out strongly in support of India saying that India's application cannot be "interlinked" with that of Pakistan and that Moscow is discussing the issue with Beijing at different levels.

China has favoured a criteria-based approach for expansion of the 48-member group, which controls international nuclear commerce, instead of one based on merit, in what India sees an attempt to draw a false equivalence between India's case and Pakistan's.

### What is NSG?

Nuclear Suppliers Group (NSG) is a multinational body concerned with reducing nuclear proliferation by controlling the export and re-transfer of materials that may be applicable to nuclear weapon development and by improving safeguards and protection on existing materials. Interestingly, the NSG was set up in 1974 as a reaction to India's nuclear tests to stop what it called the misuse of nuclear material meant for peaceful purposes.



**Background:**

India sought membership of the NSG in 2008, but its application hasn't been decided on, primarily because signing the NPT or other nuclear moratoriums on testing is a pre-requisite. However, India has received a special waiver to conduct nuclear trade with all nuclear exporters.

India, Pakistan, Israel and South Sudan are among the four UN member states which have not signed the NPT, the international pact aimed at preventing the spread of nuclear weapons.

**Why India should be granted NSG membership?**

In this game of developing nuclear weapons India has not indulged in any dubious/ clandestine activity and its programme has been developed solely by years of hard work indigenously. By this single act India has shown that developing a credible nuclear weapons programme through honest and civilian means is possible for any country having high-level scientific manpower and materials.

Besides, by declaring a voluntary moratorium on further underground nuclear tests India has effectively acted in sense and spirit of NPT/CTBT provisions. By steering its programme only as a minimum deterrence and pledging NFU unless faced with an attack of weapons of mass destruction (WMD), India has established itself as a responsible nuclear state.

**Benefits associated with NSG membership- Once admitted, an NSG member state gets:**

- Timely information on nuclear matters.
- Contributes by way of information.
- Has confirmed credentials.
- Can act as an instrument of harmonization and coordination.
- Is part of a very transparent process.

Sources: the hindu.

## ICAN receives Nobel Peace Prize

**Context:**

The International Campaign to Abolish Nuclear Weapons (Ican) has received the Nobel Peace Prize. The leader of an Australian-founded group that received the Nobel Peace Prize has warned humanity is only "one impulsive tantrum" away from a nuclear catastrophe. ICAN had campaigned for a UN Treaty on the Prohibition of Nuclear Weapons.

**About ICAN:**

- Ican, a coalition of hundreds of non-governmental organisations (NGOs), is 10 years old and is based in Geneva, Switzerland. Ican set about an alternative approach – to raise popular awareness of the issue and to pressure governments to open up a new treaty for signature earlier this year that would seek an outright ban on nuclear weapons.
- In July, after pressure from Ican, 122 nations backed a UN treaty designed to ban and eventually eliminate all nuclear weapons. But none of the nine known nuclear powers in the world – including the UK and the US – endorsed it.



Sources: the hindu.

## Asian Infrastructure Investment Bank

**Context:**

India will host the 3rd Annual Meeting of the Board of Governors of AIIB at Mumbai on 25th and 26th June 2018. In this regard, the Government of India and Asian Infrastructure Investment Bank (AIIB) Secretariat have signed the Memorandum of Understanding (MoU) to delineate the duties and responsibilities of major stakeholders who would be involved in organizing the aforesaid Annual Meeting.

*The Theme of the Annual Meeting, 2018* will be “Mobilizing Finance for Infrastructure: Innovation and Collaboration”.

#### **About AIIB:**

##### What is it?

The AIIB was established as a new multilateral financial institution aimed at providing “financial support for infrastructure development and regional connectivity in Asia.” It was founded in October, 2014, and has its headquarters in Beijing.

**Its goals** are also to boost economic development in the region, create wealth, prove infrastructure, and promote regional cooperation and partnership.

**Funding:** The value of AIIB’s authorized capital amounts to \$100 billion, with almost \$30 billion invested by China. India is not only one of the founding members of AIIB but is also the 2nd largest shareholder in AIIB.

Sources: the hindu.

## International Court of Justice (ICJ)

**Context:** Pakistan has rejected India’s plea for consular access to death row prisoner Kulbhushan Jadhav at the ICJ, claiming that New Delhi wants the access to get the information gathered by its “spy”. In its counter-memorial submitted to the International Court of Justice (ICJ), Pakistan said the provision of such an access under the Vienna Convention is only for legitimate visitors and not for spies.

India, however, maintains that Jadhav was kidnapped from Iran where he had business interests after retiring from the Navy.

#### **About ICJ:**

##### What is it?

The International Court of Justice (ICJ) is the principal judicial body of the UN. Established in 1946 to replace the Permanent Court of International Justice, the ICJ mainly operates under the statute of its predecessor, which is included in the UN Charter.

It has two primary functions: to settle legal disputes submitted by States in accordance with established international laws, and to act as an advisory board on issues submitted to it by authorized international organizations.

#### **Members of the Court:**

The International Court of Justice is composed of 15 judges elected to nine-year terms of office by the United Nations General Assembly and the Security Council. These organs vote simultaneously but separately. In order to be elected, a candidate must receive an absolute majority of the votes in both bodies. In order to ensure a measure of continuity, one third of the Court is elected every three years. Judges are eligible for re-election.

##### Who nominates the candidates?

- Every state government, party to the Charter, designates a group who propose candidates for the office of ICJ judges. This group includes four members/jurists of the Permanent Court of Arbitration (machinery which enables arbitral tribunals to be set up as desired and facilitates their work) also picked by the State. Countries not part of the statute follow the same procedure where a group nominates the candidates.
- Each group is limited to nominate four candidates, two of whom could be of their nationality. Within a fixed duration set by the Secretary-General, the names of the candidates have to be sent to him/her.

##### What are the qualifications of ICJ judges?

- A judge should have a high moral character.
- A judge should fit to the qualifications of appointment of highest judicial officers as prescribed by their respective states or.
- A judge should be a juriconsult of recognized competence in international law.

The 15 judges of the Court are distributed as per the regions:

- Three from Africa.

- Two from Latin America and Caribbean.
- Three from Asia.
- Five from Western Europe and other states.
- Two from Eastern Europe.

#### Independence of the Judges:

- Once elected, a Member of the Court is a delegate neither of the government of his own country nor of that of any other State. Unlike most other organs of international organizations, the Court is not composed of representatives of governments. Members of the Court are independent judges whose first task, before taking up their duties, is to make a solemn declaration in open court that they will exercise their powers impartially and conscientiously.
- In order to guarantee his or her independence, no Member of the Court can be dismissed unless, in the unanimous opinion of the other Members, he/she no longer fulfils the required conditions. This has in fact never happened.

Sources: the hindu.

## International Training Centre for Operational Oceanography

The Union Cabinet has approved the establishment of International Training Centre for Operational Oceanography, as a Category-2 Centre (C2C) of UNESCO, in Hyderabad.

The purpose of this Agreement is to establish a training centre towards development of capacity for the countries on the Indian Ocean Rim (IOR), African countries bordering the Indian and Atlantic Oceans, small island countries under the framework of UNESCO.

#### ***What is operational oceanography?***

The operational oceanography is an activity of conducting systematic oceanographic studies towards providing information services to various sectors viz. fisherman, disaster management, shipping, ports, coastal states, navy, coast guard, environment, offshore industries for conducting their day-to-day operations.

#### **Significance of this move:**

- The Centre will provide assistance in areas of capacity building and training, knowledge sharing and exchange of information, and hence could represent a valuable resource for UNESCO and its Intergovernmental Oceanography Commission (IOC) by enhancing the impact and visibility of UNESCO's action.
- The establishment of UNESCO Category-2 Centre will provide an opportunity for India to emerge as a leading country in the Indian Ocean. This will also help India to forge cooperation and improve engagement among the countries of the Indian Ocean, including South Asian and African states bordering the Indian Ocean.
- The establishment of the centre would respond to the worldwide increasing need to build technical and management capacity to address marine and coastal sustainability issues and prepare the region for and react efficiently to marine natural hazards.
- The Centre could contribute to achieving Sustainable Development Goal-14 (SDG 14) related to building marine scientific research capacity in geographical area of the Centre responsibility which will also fulfil the commitments to support Small Island Developing States, Least Developed Countries.
- The establishment of C2C is also expected to increase ancillary development leading to employment generation in India.

Sources: pib.

## GS PAPER - III

*Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

### Special package for employment generation in leather and footwear sector

**Context:** The Union Cabinet has approved the special package for employment generation in leather and footwear sector. The package involves implementation of Central Sector Scheme “Indian Footwear, Leather & Accessories Development Programme” with an approved expenditure of Rs. 2600 Crore over the three financial years from 2017-18 to 2019-20.

The Indian Footwear, Leather & Accessories Development Programme has the following sub- schemes:

- Human Resource Development (HRD) sub-scheme.
- Integrated Development of Leather Sector (IDLS) sub-scheme.
- Establishment of Institutional Facilities sub-scheme.
- Mega Leather, Footwear and Accessories Cluster (MLFAC) sub-scheme.
- Leather Technology, Innovation and Environmental Issues sub-scheme.
- Promotion of Indian Brands in Leather, Footwear and Accessories Sector sub-scheme.
- Additional Employment Incentive for Leather, Footwear and Accessories Sector sub-scheme.

Significance of the scheme:

- The scheme would lead to development of infrastructure for the leather sector, address environment concerns specific to the leather sector, facilitate additional investments, employment generation and increase in production.
- Enhanced Tax incentive would attract large scale investments in the sector and reform in labour law in view of seasonal nature of the sector will support economies of scale.
- The Special Package has the potential to generate 3.24 lakhs new jobs in 3 years and assist in formalization of 2 lakh jobs as cumulative impact in Footwear, Leather & Accessories Sector.

Sources: pib.

### Prompt correction action (PCA)

**Context:** The Reserve Bank of India (RBI) has once again clarified that prompt correction action (PCA) is imposed to encourage banks to improve their financial health. The reiteration comes in the wake of rumours on social media that some of the banks that are under PCA could be closed down.

#### What is PCA?

PCA norms allow the regulator to place certain restrictions such as halting branch expansion and stopping dividend payment. It can even cap a bank’s lending limit to one entity or sector. Other corrective action that can be imposed on banks include special audit, restructuring operations and activation of recovery plan. Banks’ promoters can be asked to bring in new management, too. The RBI can also supersede the bank’s board, under PCA.

#### When is PCA invoked?

The PCA is invoked when certain risk thresholds are breached. There are three risk thresholds which are based on certain levels of asset quality, profitability, capital and the like. The third such threshold, which is maximum tolerance limit, sets net NPA at over 12% and negative return on assets for four consecutive years.

#### What are the types of sanctions?

There are two type of restrictions, mandatory and discretionary. Restrictions on dividend, branch expansion, directors compensation, are mandatory while discretionary restrictions could include curbs on lending and deposit. In the cases of two banks where PCA was invoked after the revised guidelines were issued — IDBI Bank and UCO Bank — only mandatory restrictions were imposed. Both the banks breached risk threshold 2.

## Prompt Corrective Action – Capital Thresholds

**New Minimum Capital Requirements and Changes to Prompt Correction Action (PCA) thresholds – The new rules implement higher minimum capital requirements and establish a new common equity tier 1 capital.**

- Basel III revises the capital thresholds of the Prompt Corrective Action (PCA) categories, including the well-capitalized standard, which derives itself from Dodd Frank Act.
- The revised PCA thresholds are effective from January 1, 2015.

PCA Threshold	Risk Based Capital Ratios			Leverage Ratio
	Total Capital (Unchanged)	Tier 1 Capital	CET 1 Capital	
Well capitalized	> = 10%	> = 8%	> = 6.5%	> = 5%
Adequately capitalized	> = 8%	> = 6%	> = 4.5%	> = 4%
Undercapitalized	< 8%	< 6%	< 4.5%	< 4%
Significantly undercapitalized	< 6%	< 4%	< 3%	< 3%
Critically undercapitalized	Tangible equity (defined as Tier 1 capital plus non-Tier 1 perpetual preferred stock) to total assets ≤ 2%			

### What will a bank do if PCA is triggered?

Banks are not allowed to re new or access costly deposits or take steps to increase their fee-based income. Banks will also have to launch a special drive to reduce the stock of NPAs and contain generation of fresh NPAs. They will also not be allowed to enter into new lines of business. RBI will also impose restrictions on the bank on borrowings from interbank market.

Sources: the hindu.

## Finance Ministry to issue recapitalisation bonds to PSBs

**Context:** The Ministry of Finance is likely to issue the first tranche of recapitalisation bonds to public sector banks (PSB) in early January. The recapitalisation bonds will not be sold in open market and will be issued to all banks. Apart from this, the government will also infuse capital worth Rs 8,000 crore on the basis of performance.

### Background:

Earlier in October, the government had announced an unprecedented PSU banks recapitalisation programme of Rs 2.11 lakh crore. This was essential to improve the lending capacity of the banks and to increase public spending on infrastructure.

### Nature of re-cap bond:

The government will issue bonds worth Rs 1.35 lakh crore to PSBs against equity shares. This then becomes a cash-neutral transaction (instead of a direct cash infusion). The government can also float a bank holding company, transfer all its shares in PSBs to this corporate entity, infuse some capital into this entity. This entity then borrows in the market against its equity as a AAA Quasi-Sovereign entity and uses the money to recapitalise the banks.

### Fiscal implication:

Since upfront it's a cash neutral transaction, fiscal deficit will be impacted only by the interest cost on the bonds that the government pays every year. The government's overall debt/GDP ratio though will increase to the extent of the bond issued and so will its repayment obligations. Whenever the banks require liquidity, they can sell these bonds in the market, raise cash and use it for either lending or write-off purposes.

### Significance of this move:

Ultimately, this recapitalisation will lead to an improvement in the government's finances as it would also be able to sell its stake in public sector banks at much higher valuations. Even on the demand side, some banks who were not

investing their extra cash into debt securities due to capital shortage may now be able to do so instead of placing them with the Reserve Bank of India's reverse repos.

Sources: the hindu.

## Special Economic Zone (SEZ)

**Context:** A commerce ministry-appointed panel has suggested few changes in the existing SEZ rules.

### Background:

In order to align the SEZ rules 2006 with the GST (Goods and Services Tax) laws as well as for removal of various difficulties faced, the committee was constituted by the ministry to make necessary recommendations.



### Proposed changes:

- The Board of Approval (BoA), the highest decision making body for SEZs, should be given additional powers to exempt units and developers from certain rules to promote these zones.
- The other suggestions include submission of GST registration certificate instead of sales tax registration. It also provides for obtaining national security clearance as per guidelines issued by the home affairs ministry.
- The committee has also sought the establishment of a SEZ Rules Interpretation Committee to help in ease of operations, as well as suggestions to reduce paper work for developing SEZ units.

### What is a SEZ?

A Special Economic Zone (SEZ) is a geographical region that has economic laws more liberal than a country's typical economic laws. They are established with an aim to purport development, promote rapid economic growth by providing tax and business incentives for attracting foreign technology along with investment. These are not merely

SEZ's but may be called as "favorite Investment destinations" for foreign establishments. Such units would be future sources of employment, hubs of latest technologies and equipped with the best infrastructure.

Sources: the hindu.

*Paper 3 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.*

### RERA's administration under Urban Affairs Ministry's domain

The work of the Real Estate (Regulation and Development) Act, 2016, which mandates the establishment of the Real Estate Regulatory Authority (RERA), will be looked after by the Urban Affairs Ministry. The central government has amended the Government of India (Allocation of Business) Rules 1961, in this regard.

#### About the Real Estate (Regulation and Development) Act, 2016:

The RERA is for regulation and promotion of the real estate sector and to ensure sale of plot, apartment or building in an efficient and transparent manner and to protect the interest of consumers in the real estate sector.

- It makes it mandatory for all builders – developing a project where the land exceeds 500 square metre – to register with RERA before launching or even advertising their project.
- The promoter of a real estate development firm has to maintain a separate escrow account for each of their projects. A minimum 70% of the money from investors and buyers will have to be deposited. This money can only be used for the construction of the project and the cost borne towards the land.
- RERA requires builders to submit the original approved plans for their ongoing projects and the alterations that they made later. They also have to furnish details of revenue collected from allottees, how the funds were utilised, the timeline for construction, completion, and delivery that will need to be certified by an Engineer/Architect/practicing Chartered Accountant.

Sources: the hindu.

### Amendments to Companies Act

**Context:** The Rajya Sabha has passed the Companies (Amendment) Bill, 2017. It was adopted by the Lok Sabha in July this year. The Bill provides for more than 40 amendments to the Companies Act, 2013.

#### Highlights of the Bill:

- The amendment seeks to strengthen corporate governance standards, initiate strict action against defaulting companies and help improve ease of doing business in the country.
- The major changes include simplification of the private placement process; rationalization of provisions related to loans to directors; replacing the requirement of approval of the central government for managerial remuneration above prescribed limits by approval through special resolution of shareholders and aligning disclosure requirements in the prospectus with the regulations made by Sebi (Securities and Exchange Board of India).
- The Bill also provides for maintenance of register of significant beneficial owners and makes offence for contravention of provisions relating to deposits as non-compoundable.
- It also provides for stringent penalties in case of non-filing of balance sheet and annual return every year, which will act as deterrent to shell companies. This would facilitate ease of doing business, and result in harmonization with Sebi, RBI (Reserve Bank of India) and rectify certain omissions and inconsistencies in the existing Act.

Sources: the hindu.

### Scheme for Capacity Building in Textiles Sector (SCBTS)

**Context:** The Cabinet Committee on Economic Affairs has given its approval for a **new skill development scheme** covering the entire value chain of the textile sector excluding Spinning & Weaving in organized Sector, titled "Scheme for Capacity Building in Textile Sector (SCBTS)" from 2017-18 to 2019-20 with an outlay of Rs. 1300 crore.

**Key facts:**

- The scheme will have National Skill Qualification Framework (NSQF) compliant training courses with funding norms as per the Common Norms notified by Ministry of Skill Development and Entrepreneurship (MSDE).
- The scheme will be implemented for the benefit of all sections of the society across the country including rural, remote, LWE affected, North East, J&K by imparting skills in the identified job roles. Preference will be given to various social groups, SC, ST, differently abled, minorities and other vulnerable groups.
- The skilling programmes would be implemented through textile Industry /Units, reputed training institutions and Institutions of Ministry of Textiles /State Governments having placement tie-ups with textile industry/units.
- The objectives of the scheme are to provide demand driven, placement oriented skilling programme to incentivize the efforts of the industry in creating jobs in the organized textile and related sectors; to promote skilling and skill up-gradation in the traditional sectors through respective Sectoral Divisions/organizations of Ministry of Textiles; and to provide livelihood to all sections of the society across the country.

Sources: pib.

## Regional Comprehensive Economic Partnership (RCEP)

**Context:** In a sign that India's Free Trade Agreement (FTA) negotiations could slow further, the Ministry of External Affairs (MEA) has taken a strong stand that the country should restrain itself from concluding any such pact from which it would not gain in the medium term. The Ministry has called for observance of due restraint and not conclude trade arrangements which are not to India's medium term advantage. A lot of India's free trade agreements have not served as well as they could have.

The statement is significant coming ahead of the ASEAN-India commemorative summit to be held on January 25, where the issue of the long-delayed Regional Comprehensive Economic Partnership (RCEP) will likely take centre stage.

**Way ahead:**

Though larger FTAs are important for getting preferential access to the markets, it is important to be cautious about the manner in which such arrangements work out in respect of India's imports as well as on the country's efforts to increase the share of manufacturing sector in the economy.

**What you need to know about RCEP?**

- RCEP is proposed between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam) and the six states with which ASEAN has existing FTAs (Australia, China, India, Japan, South Korea and New Zealand).
- RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia. RCEP is viewed as an alternative to the TPP trade agreement, which includes the United States but excludes China.

**Concerns associated with RCEP:**

- Emphasis of RCEP is on trade in goods and the same enthusiasm is not shared for trade in services. The reluctance in giving market access for trade in services is a big challenge for India. While there is immense pressure on India in the RCEP negotiations to commit to opening up (90%) of its traded goods, what is troubling the government is the fact that other RCEP countries have so far been lukewarm to India's demands for greater market access in services, particularly on easing norms on the movement of professionals and skilled workers across borders for short-term work.
- India, which is defensive regarding opening up its goods sector, is currently virtually isolated in the RCEP talks. Also, existing huge goods trade deficit has led to questions on whether the pact is only helping ASEAN nations and not benefiting India.

**What needs to be done?**

India's FTA strategy has to be guided by the 'Make In India' initiative that aims to boost domestic manufacturing and job creation within India. In return for greater market access in goods, India, with its large pool of skilled workers and professionals, should try to use the RCEP to gain on the services side, by securing commitments from the other nations to mutually ease norms on movement of such people across borders for short-term work.

Sources: the hindu.

**Paper 3 Topic:** Major crops cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

## Soil Health Card

**Context:** On the occasion of **World Soil Day**, Soil Health Card mobile App has been launched by the government to help the farmers.

**Key facts:**

The app will benefit field-level workers as it will automatically capture GIS coordinates while registering sample details at the time of sample collection in the field and indicate the location from where the sample has been collected.

This app works like other Geotagging apps developed for the Rashtriya Krishi Vikas Yojana. The app contains farmers' details including name, Aadhaar card number, mobile number, gender, address, crop details, etc.

**About World Soil Day:**

World Soil Day (**WSD**) is held annually on 5 December as a means to focus attention on the importance of healthy soil and advocating for the sustainable management of soil resources.

- UN General Assembly designated 5 December 2014 as the first official World Soil Day. The date of 5 December for WSD was chosen because it corresponds with the official birthday of H.M. King Bhumibol Adulyadej, the King of Thailand, who officially sanctioned the event.
- 2017 Theme: 'Caring for the Planet starts from the Ground'.

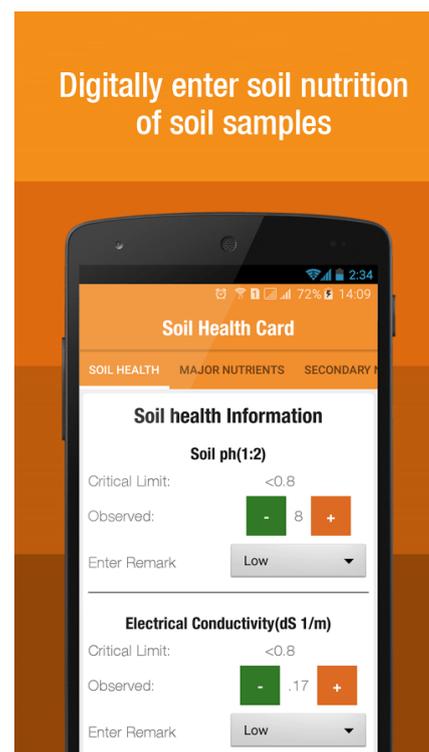
**Soil facts- and why is soil important?**

- Soil is one of the most complex biological materials on our planet. Soil is the network of interacting living organisms within the earth's surface layer which support life above ground. The nutritional value of the food we eat is directly related to the health of the soil in which it grows.
- Carbon is a master variable within the soil that controls many processes, such as development of soil structure, water storage and nutrient cycling. Soil high in organic carbon content enables better rainfall infiltration & retention – providing greater resilience to drought.
- Management: Soil erosion within conventional agricultural practices can occur at rates up to 100 times greater than the rate of natural soil formation. Natural processes can take more than 500 years to form 2 centimetres of topsoil. Soils are vulnerable to carbon loss through degradation, but regenerative land management practices can build soil and restore soil health. Therefore, management of agricultural soils should consider the structural, biological and mineral health of the soil (not just N, P, K) to produce nutritionally-dense food.

**About the Soil Health Card Scheme:**

It is a scheme to provide every farmer a Soil Health Card in a Mission mode. It is a scheme under which the Central Government provides assistance to State Governments for setting up Soil Testing Laboratories for issuing Soil Health Cards to farmers.

- The scheme will be implemented in all states to promote soil testing services, issue of soil health cards and development of nutrient management practices.



- State Governments have adopted innovative practices like involvement of agricultural students, NGOs and private sector in soil testing, determining average soil health of villages, etc., to issue Soil Health Cards.
- The state governments will prepare yearly action plan on the issue and the cost will be shared in the ratio of 75:25 between the Centre and states.
- The scheme assumes importance as the imbalanced application of fertilisers have caused deficiency of primary nutrients (nitrogen, phosphorus, and potassium), secondary nutrients (such as sulphur), and micro-nutrients (boron, zinc, copper etc.) in most parts of country.

#### **Soil health cards:**

A Soil Health Card displays soil health indicators and associated descriptive terms. The indicators are typically based on farmers' practical experience and knowledge of local natural resources.

The card lists soil health indicators that can be assessed without the aid of technical or laboratory equipment. The card, which will carry crop-wise recommendation of fertilisers required for farm lands, will help farmers identify health of soil and judiciously use soil nutrients.

Sources: the hindu.

*Paper 3 Topic: Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.*

### **Fund to help milk co-ops expand capacity**

**Context:** The National Bank for Agriculture and Rural Development will soon get going on a Rs 8,000-crore fund that the finance minister announced in this year's budget to support the dairy sector. Under the Dairy Processing and Infrastructure Development Fund, Nabard is the nodal agency to finance projects over a period of three years.

#### **Benefits of this fund:**

After Operation Flood which ended in 1990, this is the biggest dairy development programme. It will surely help small dairy cooperatives in states like Punjab, Haryana and Bihar where there is huge scope of expansion. The fund would help dairy cooperative in setting up modern milkprocessing infrastructure, expanding product portfolio and ensuring optimum value for their products.

#### **Significance of this move:**

NABARD targets to sanction proposals to create new milk processing capacity of 27 million litres per day in the cooperative sector this year. With this investment, the milk processing capacity (in the cooperative sector) would increase from the current 66 million litres per day to 92.6 million litres per day. Further, the bulk milk-chilling capacity would go up from 48 million litres per day to 63 million litres.

#### **Background:**

The dairy processing infrastructure of cooperatives needs modernisation and capacity enhancement, and with most cooperatives sharing their profits with milk producers, they need support.

#### **NABARD:**

It is an apex development and specialized bank established on 12 July 1982 by an act by the parliament of India. Its main focus is to uplift rural India by increasing the credit flow for elevation of agriculture & rural non farm sector.

- It was established based on the recommendations of the Committee set up by the Reserve Bank of India (RBI) under the chairmanship of Shri B. Shivaraman.
- It replaced the Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of Reserve Bank of India, and Agricultural Refinance and Development Corporation (ARDC).
- It has been accredited with "matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas in India".

**Important functions:**

- It Serves as an apex financing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas.
- It takes measures towards institution building for improving absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, training of personnel, etc.
- It regulates the cooperative banks and the RRB's, and manages talent acquisition through IBPS CWE.
- NABARD is also known for its 'SHG Bank Linkage Programme' which encourages India's banks to lend to SHGs.

Sources: pib.

## LDF-Mobile App

**Context:** Union Ministry of Agriculture and Farmers' Welfare has launched Livestock Disease Forewarning –Mobile Application (LDF-Mobile App).

**About the LDF-Mobile App:**

The app has been developed by ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI), Bengaluru. ICAR-NIVEDI uses Monthly Bulletin system to send out early warning.

- Apart from early warning, the app will also provide information about clinical samples for the diagnosis in case of the epidemic so that immediate action in case of the epidemic.
- This app will be beneficial for the consumers and stakeholders engaged in disease control programmes.

Sources: pib.

**Paper 3 Topic:** *Infrastructure: Energy, Ports, Roads, Airports, Railways etc.*

## Regional Rapid Transit System (RRTS)

**Context:** An indo-spanish technical cooperation (government to government) agreement has been signed. This agreement will provide institutional mechanism for mutual cooperation in the field of urban transport and specially in implementation of RRTS project.

The agreement will enable availability of technical advice on specific issues, besides providing training and collaboration in the technical areas of Track, Signalling, Rolling Stock, Safety, Multi modal integration, station design etc.

**About RRTS:****What is it?**

RRTS, first of its kind project in India, with design speed of 180 kmph will use state of the art technologies for track structure, rolling stock and signalling system. Expertise and experience in India on these technologies for higher speeds being limited, International expertise will be tapped for efficient implementation of project, operation of system and developing capacity in the country.

**Significance of RRTS:** RRTS will significantly reduce the travel time between important NCR towns. On completion, RRTS will emerge as the fastest, comfortable and safe mode of transport in NCR.

**RRTS consists of three corridors** viz., Delhi-Ghaziabad-Meerut, Delhi-Gurgaon-Alwar and Delhi-Panipat sections with a total length of 380 kms.

**Implementation:** National Capital Region Transport Corporation, a Joint Venture of Government of India and State Governments of Uttar Pradesh, Rajasthan, Haryana and Delhi, is mandated to design, construct, operate & maintain rail based Regional Rapid Transit System (RRTS).



Sources: pib.

## Railways appoints IRSDC as nodal agency for station redevelopment plan

### Context:

Indian Railways has decided to appoint its joint venture company Indian Railway Station Development Corp. Ltd (**IRSDC**) as the nodal agency for its ambitious station redevelopment programme, in an attempt to expedite the revamp of 400 A1 and A category railway stations. Under the Rs1 trillion station redevelopment plan, Indian Railways plans to revamp 400 railway stations by monetizing 2,700 acres of spare railway land.

### Background:

The appointment of IRSDC, a joint-venture between Ircon International Ltd and Rail Land Development Authority (RLDA), took place following recommendations from a three-member committee of experts, which had submitted its report in November.

The report recommended IRSDC's appointment as a nodal agency to ensure a speedy redevelopment process because the firm has shown notable performance in handling its model projects in places such as Gandhinagar and Surat.

### About IRSDC:

Indian Railway Stations Development Corporation Limited (IRSDC) is a Joint Venture company of Ircon International Limited (IRCON) (A Govt. of India Undertaking, under Ministry of Railways) and Rail Land Development Authority (RLDA), a statutory authority under the Ministry of Railways. The core purpose of IRSDC as envisioned is to build world class railway stations that apply state of the art sustainable technologies in delivering delight to the users.

Sources: the hindu.

## Asian Development Bank (ADB)

### Context:

Asian Development Bank (**ADB**) will fund highway upgradation project in Karnataka for which it has approved a loan of USD 346 million. This is ADB's second funding to Karnataka, whose per capita income is higher than the national average and has lower unemployment and poverty rates.

The project will see construction of planned pedestrian, installation of women-friendly elements including bus shelters, marked crossings, footpaths and proper signage, among others. The project will also carry out a road safety survey to identify critical accident spots across the state highways and carry out measures to improve these.

### About ADB:

#### What is it?

It is a regional development bank established on 22 August 1966 and is headquartered in Philippines. It aims to facilitate economic development of countries in Asia. It also aims for an Asia and Pacific free from poverty.

The bank admits the members of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, formerly known as the United Nations Economic Commission for Asia and the Far East) and non-regional developed countries.

#### **Voting:**

ADB was modeled closely on the World Bank, and has a similar weighted voting system where votes are distributed in proportion with member's capital subscriptions.

#### **Board of Governors:**

- It is the highest policy-making body of the bank.
- It is composed of one representative from each member state.
- The Board of Governors also elect the bank's President who is the chairperson of the Board of Directors and manages ADB.
- The Alternate Board of Governors are nominated by Board of Governors of ADB's 67 to represent them at the Annual Meeting that meets formally once year to be held in a member country.

**Loans:**

It offers both Hard Loans and Soft loans. The ADB offers “hard” loans from ordinary capital resources (OCR) on commercial terms, and the Asian Development Fund (ADF) affiliated with the ADB extends “soft” loans from special fund resources with concessional conditions.

Sources: the hindu.

## New bridges inaugurated in eastern Arunachal Pradesh

**Context:** Two crucial bridges in eastern Arunachal Pradesh have been dedicated to the nation. The bridges have been built by the Border Roads Organisation (BRO).

The new bridges are:

**Injupani Bridge:** It is a 140-metre long-bridge on Roing-Koronu-Paya road, which is a part of Trans Arunachal Highway. The completion of the Injupani Bridge will provide an uninterrupted access between Roing & Tezu, both important district HQs in Arunachal Pradesh.

**Deopani/Eze Bridge:** It is 300-metre long pre-stressed concrete balanced cantilever bridge over the Eze river at Roing in Arunachal Pradesh. The completion of the Eze bridge has come as a boon for the people of the area, especially those of Dibang Valley district, as the district remained cut off from the rest of the country during the monsoons each year.

**About BRO:**

Functioning under the control of the Ministry of Defence since 2015, the BRO is engaged in road construction to provide connectivity to difficult and inaccessible regions in the border areas of the country.

- It is staffed by officers and troops drawn from the Indian Army's Corps of Engineers, Electrical and Mechanical Engineers, Army Service Corps, Military Police and army personnel on extra regimental employment.
- Engineering Service and personnel from the General Reserve Engineer Force (GREF) form the parent cadre of the Border Roads Organisation.
- Currently, the organisation maintains operations in twenty-one states, one UT (Andaman and Nicobar Islands), and neighbouring countries such as Afghanistan, Bhutan, Myanmar, and Sri Lanka.
- The BRO operates and maintains over 32,885 kilometres of roads and about 12,200 meters of permanent bridges in the country.

Sources: pib.

## IMT highway

**Context:**

India is planning to hold talks with ASEAN countries to extend the India-Myanmar-Thailand highway up to Vietnam. As per proposals from India, the highway could be extended to Vietnam via Laos and Cambodia.

**Significance of this expansion:**

This connectivity can generate an estimated \$70 billion annually in incremental GDP and \$20 million in incremental aggregate employment by 2025. Connecting India with the South eastern countries through a



The India-Myanmar-Thailand Trilateral Highway will run from Moreh in Manipur to Mae Sot in Thailand via Myanmar. (Reuters)

network of road will create jobs, market for crops grown in hilly regions of the Northeast which will also help growers in getting better price for their produce.

#### About IMT highway:

The India–Myanmar–Thailand Trilateral Highway is a highway under construction under India's Look East policy that will connect Moreh, India with Mae Sot, Thailand via Myanmar. The road is expected to boost trade and commerce in the ASEAN–India Free Trade Area, as well as with the rest of Southeast Asia. It is important to note that the project already missed its first deadline in 2015 and India has consistently faced difficulty in implementing its projects in Myanmar.

#### Background:

The Association of Southeast Asian Nations (Asean), has 10 member nations Indonesia, Malaysia, The Philippines, Singapore, Thailand, Brunei Darussalam, Vietnam, Lao PDR, Myanmar and Cambodia.

Sources: the hindu.

## Tuirial Hydroelectric Power Project

**Context:** The 60 MW Tuirial Hydro Electric Power Project (HEPP) has been formally dedicated to the Nation.

#### **About the project:**

- The Project is the biggest power project located in the State of Mizoram and will feed the entire energy to be generated to the home State, which will facilitate all-round development of the State and achieving Government of India's ambitious and flagship Mission '24x7 Affordable Clean Power for All'.
- The Tuirial HEPP has been constructed as a Central Sector Project and implemented by North Eastern Electric Power Corporation (NEEPCO), under the administrative control of the Ministry of Power, Government of India.

#### **Significance of this project:**

The State's current demand of electricity is only 87 MW and this is being met by State's mini power projects and availability of its share of power from central sector projects. With the additional 60 MW of electricity from the project, the State of Mizoram will now be the third power-surplus State in North East India after Sikkim and Tripura. Apart from attaining self-sufficiency in electric power, the project will fetch other spin-off benefits to the State of Mizoram like employment generation, navigation, water supply, pisciculture and wild life conservation, tourism etc.

Sources: pib.

## Bharatmala

**Context:** In order to expedite implementation of the Bharatmala Pariyojna, the project launched by the Government of India with prime focus on optimizing efficiency of the movement of goods and people across the country, NHA has decided to start an incentive scheme for its officials.

- The scheme not only envisages completing the projects earlier than the scheduled time, but also aims at savings on account of cost overruns due to time delays. The scheme will reward hardworking, meritorious officials and will act as a catalyst to motivate other officials to work more efficiently.
- Under this scheme, cash incentives and other rewards such as Certificates, Trophy, Appreciation letters, etc., would be given to the NHA officials to complete the assigned task in a time bound manner.

#### **What is Bharatmala project?**

- Bharatmala Project is the second largest highways construction project in the country since NHDP, under which almost 50,000 km or highway roads were targeted across the country. Bharatmala will look to improve connectivity particularly on economic corridors, border areas and far flung areas with an aim of quicker movement of cargo and boosting exports.
- Bharatmala includes economic corridors of around 9,000 km, inter-corridor and feeder routes of around 6,000 km, 5,000 km roads under the National Corridors Efficiency Program, border and international connectivity roads of around 2,000 km, coastal and port connectivity roads of around 2,000 km, expressways of around 800 km and 10,000 km of NHDP roads. The total length in phase 1 comes to around 34,800 km.

**Significance of the project:**

The project is expected to create nearly 100 million man days of jobs during the road construction and subsequently 22 million jobs as a result of the increased economic activity across the country.

Sources: pib.

## BBIN motor pact

**Context:** Pending ratification from Bhutan, India plans to operationalise BBIN motor vehicle agreement (MVA) with Bangladesh and Nepal for seamless movement of passenger and cargo vehicles.

**Background:**

Bangladesh, Bhutan, India and Nepal (BBIN) had signed a framework MVA in June 2015 to enable movement of passenger and cargo vehicles across borders among the four countries. Bhutan has not yet ratified the pact for its entry to come into force. However, Bhutan has given its consent for the BBIN MVA to enter into force amongst the other 3 countries i.e. Bangladesh, India and Nepal, who have already ratified it.

**About BBIN agreement:**

The agreement encapsulates the spirit of economic integration emphasised in the SAARC Charter. The main objective of the agreement is to provide seamless people-to-people contact and enhance economic interaction by facilitating cross border movement of people and goods.

- It would permit unhindered movement of passenger and cargo vehicles among the four countries. Cargo vehicles do not have to be changed at the border, a practice that has prevailed until now.
- As per the agreement, member countries would allow vehicles registered in the other countries to enter their territory under certain terms and conditions. Customs and tariffs will be decided by the respective countries and these would be finalised at bilateral and trilateral forums.
- The BBIN agreement will promote safe, economical efficient and environmentally sound road transport in the sub-region and will further help each country in creating an institutional mechanism for regional integration.

On Monday, transport ministers of Bangladesh, Bhutan, India and Nepal (BBIN) will sign a motor vehicles agreement in a bid to boost trade and sub-regional connectivity among the four nations. The BBIN pact will also set the stage for a new connectivity paradigm in India's north-east, which is looking for easier access not just to mainland India but also to South-east Asia, a high growth area of the continent.

Mint takes a look at the operational and proposed transportation links.

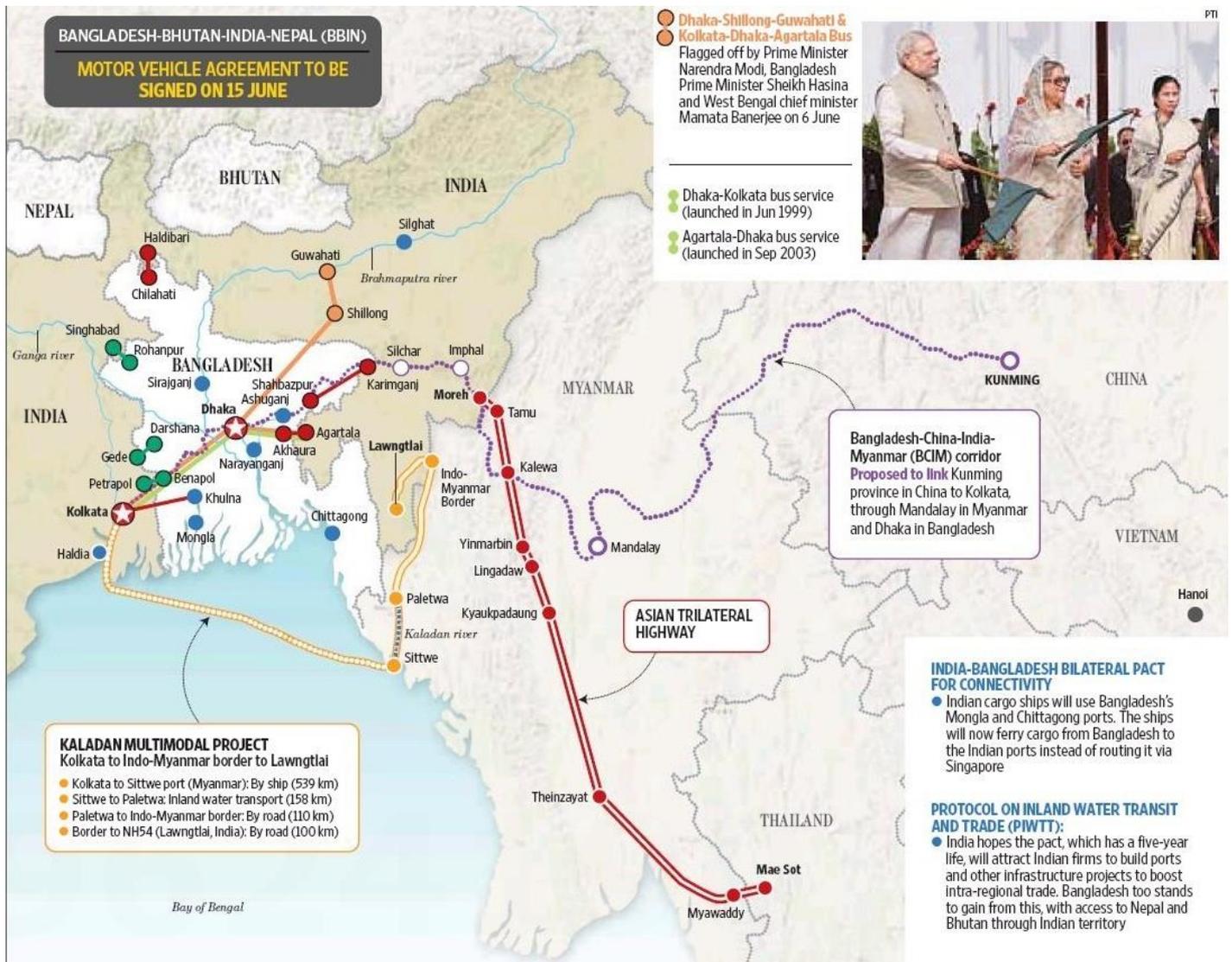


### OPERATIONAL RAIL LINKS

- Petrapol (India)-Benapol (Bangladesh)
- Gede (India)-Darsana (Bangladesh)
- Singhabad (India)-Rohanpur (Bangladesh)

### PROPOSED RAIL LINKS

- Maitree Express between Khulna (Bangladesh) and Kolkata
- Akhaura (Bangladesh)-Agartala railway link
- Radhikapur (India)-Biroi (Bangladesh)
- Karimganj/Mahisasan (India)-Shahbazpur (Bangladesh)
- Haldibari (India)-Chilhati (Bangladesh)



Sources: the hindu.

## Pare Hydroelectric Plant

**Context:** A Loan agreement and a Guarantee agreement for providing additional funding of Euro 20 million has been signed for the project 'Pare Hydroelectric Plant' under Indo-German Bilateral Development Cooperation.

### About the Pare Hydroelectric project:

What is it? The Pare Hydro Electric Project (2 x 55 MW) is planned as a run-of-the-river scheme on the Dikrong River in the Papumpare District of Arunachal Pradesh.

**The broad objective of the project** is generation of hydroelectric power for socio-economic development of the North Eastern Region.

**The purpose of the project** is efficient and ecological friendly generation of electric power. This will contribute to the economic efficient generation of power, growth in the North East region and protection of global climate.

### Facts for Prelims:

The Dikrong is one of the major north bank tributaries of the river Brahmaputra, which originates from the lesser Himalayan ranges in Arunachal Pradesh. The total length of river Dikrong is 145 kilometer. It flows through the hilly region of Arunachal Pradesh for a distance of about 113 kilometer and remaining 32 kilometers it flows through the plains of Assam.



Sources: pib.

## India's first pod taxi on the way, to follow U.S. safety norms

**Context:** The much-awaited India's first pod taxi project- also known as Personal Rapid Transit (PRT)- has moved a step closer to reality after a high-level panel recommended inviting fresh bids for the same conforming to the strictest safety standards on the lines of those prescribed by an American body.

The committee set up for technical and safety standards of PRT has recommended issuance of a fresh EOI (expression of interest) incorporating (automated people movers) APM standards and specifications, along with other general safety parameters with Niti Aayog recommendations.

**The future of travel**

A look at the next generation mode of travel in India, the pod-taxi, which is estimated to be operationally cheaper than the Metro rail

- Pods can carry upto 5 passengers at a time, and are fully automatic, driverless and travel independently over an overhead network which is usually about 5 - 10 meters above the ground
- Pods are equipped with military grade wireless technology and sensors, which are monitored at a command base and on the ground for extra security and safety

**Advantages**

- The pods and the network are not affected by adverse weather conditions
- They can move along dense crowded and congested roads and localities
- The pod network saves fuel, cost of transportation and pollution

**Proposed route: Rajiv Chowk (New Delhi)- Gurugram: 12.3 km**

Project cost: ₹ 4,000 crore

Project management: NHA

Photo for representational purpose; - GETTY IMAGES

Map labels: Ambience Mall, IFFCO Chowk, Haryana, Delhi, Rajiv Chowk, Sec 58 Docking station, NH-8

### Proposed safety standards:

The automated people mover (APM) standards in the US as recommended by the committee for the maiden PRT in India have been prepared by the American Society of Civil Engineers (ASCE) and these constitute the minimum requirements for an acceptable level of safety and performance for the PRT. The APM standards include minimum requirements for the design, construction, operation and maintenance of the various sub-systems of an APM system and are in general relevant for a PRT. These include vehicle arrival audio and video visual warning system, platform sloping, evacuation of misaligned vehicles, surveillance/CCTV, audio communication, emergency call points and fire protection, among other advanced systems.

### About the project:

This pilot project will cover a stretch of 13 kilometres from the Gurugram-Delhi border to Badshapur Mod on Sohna Road with a total of 16 stations. For this, a budget of Rs 850 crore has been estimated. The feasibility report for the same has been submitted by the National Highway Authority of India (NHA). Every pod of Metrino taxi can accommodate up to five passengers.

### What is Personal rapid transit (PRT) network?

Sized for individual or small group travel, personal rapid transit (PRT) is a transport mode combining small automated vehicles, known as pods, operating on a network of specially built guideways. The network consists of a number of stations or stops for passengers to get on and get off. The average speed of the pods is 60 kilometres per hour.

### Brief history of Personal rapid transit (PRT) network:

- The modern PRT concept began around 1953 when Donn Fichter, a city transportation planner, began research on PRT and alternative transportation methods
- In 1967, Aramis project, an experimental personal rapid transit system was started by aerospace giant Matra in Paris. The project was, however, cancelled when it failed its qualification trials in November 1987
- Between 1970 and 1978, Japan operated a project called "Computer-controlled Vehicle System" (CVS). In a full-scale test facility, 84 vehicles operated at speeds up to 60 kilometres per hour on a 4.8 kilometres guideway.

Sources: the hindu.

## Government eyes 100% electric public transport through FAME II

The Centre is targeting a fully electric fleet for country's public transport, including buses, taxis and auto-rickshaws under the second phase of FAME India scheme. This move is mainly aimed at reducing pollution in the country.

### Background:

The pilot phase or phase I of the Faster Adoption and Manufacturing of Hybrid and Electric vehicles in India (FAME India) was launched by the government in 2015, which expires on March 31, 2018. Thereafter, the phase II will be launched.



### About FAME India scheme:

**What is it?** With an aim to promote eco-friendly vehicles, the government had launched the Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME-India) scheme in 2015.

**Aim:** The FAME India Scheme is aimed at incentivising all vehicle segments, including two-wheelers, three wheeler auto, passenger four-wheeler vehicle, light commercial vehicles and buses. The scheme covers hybrid and electric technologies like a strong hybrid, plug-in hybrid and battery electric vehicles.

**Facts:** FAME India – Faster Adoption and Manufacturing of Hybrid and Electric vehicles in India – is a part of the National Electric Mobility Mission Plan. The scheme envisages Rs 795 crore support in the first two fiscals starting with the current year. It is being administered by the Heavy Industries Ministry.

Sources: ET.

**Paper 3 Topic:** Science and Technology- developments and their applications and effects in everyday life  
Achievements of Indians in science & technology; indigenization of technology and developing new technology.

## Akash Missile

### Context:

Supersonic surface-to-air missile- Akash with indigenous radio frequency seeker was recently test fired from a test range in Odisha. With the successful test firing, India has achieved the capability of making any type of surface to air missile.



### What you need to know about the Missile?

- Akash, the supersonic missile, is the first surface-to-air missile with indigenous seeker to be test fired and is being inducted into the Army as short range surface to air missile.
- It has a strike range of about 25 km and carries a 55- kg fragmentation warhead that is triggered by proximity fuse.
- It is an all-weather area air defence weapon system for defending vulnerable areas against medium range air targets penetrating from low, medium and high altitudes.
- Developed by the Defence Research and Development Organisation (DRDO), the Akash missile system has the capability to neutralise aerial targets like fighter jets, cruise missiles and air-to-surface missiles as well as ballistic missiles.
- The system is designed to neutralise multiple aerial targets attacking from several directions simultaneously. The system is autonomous and its operation is fully automated. There is flexibility in deployment.
- It uses state-of-the-art integral ram jet rocket propulsion system and the onboard digital autopilot ensures stability and control. Electro-pneumatic servo actuation system controls cruciform wings for agile response and thermal batteries provide onboard power supply.

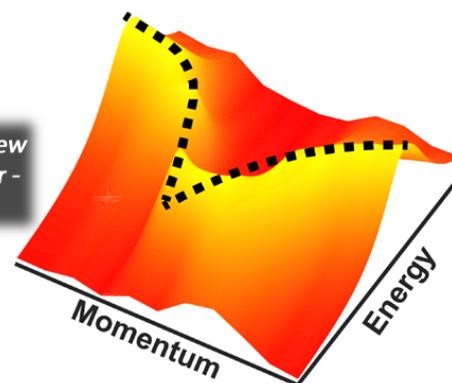
Sources: pib.

## New form of matter 'excitonium'

### Context:

Researchers at the University of Illinois have announced an exciting finding — the discovery of a new form of matter: excitonium. The existence of this matter has been theorized for 50 years.

Discovery of New  
Form of Matter -  
Excitonium!



### About "excitonium":

It is made up of excitons – unusual particles made up of an escaped electron and the hole it has left behind in a material. This quirky quantum-mechanical pairing is possible because, in semiconductors, electrons on the edge of one energy level in an atom are able, when excited, to jump into the next energy level, leaving behind a "hole" in the previous level. This hole acts like a positively charged particle, attracting the negatively charged electron that escaped.

### Background:

Scientists used a novel technique called momentum-resolved electron energy-loss spectroscopy (M-EELS) for the study. With their new technique, the group was able to measure collective excitations of the low-energy bosonic particles, the paired electrons and holes.

### Way ahead:

Now that excitonium has been proven to exist and has been concretely observed in experimentation, its properties can be further explored and applied. Most obviously, as a superconductor and superfluid, this material could be used to further existing technologies.

Additionally, since analyzing quantum phenomena is what guides and shapes our understanding of quantum mechanics, this research could help to further de-mystify current quantum puzzles. These applications, especially those in practical technologies, are purely speculative at this point, however. It is impossible to exactly predict what the future might hold for excitonium, but we do know for certain that it has more potential now than it ever has before.

Sources: the hindu.

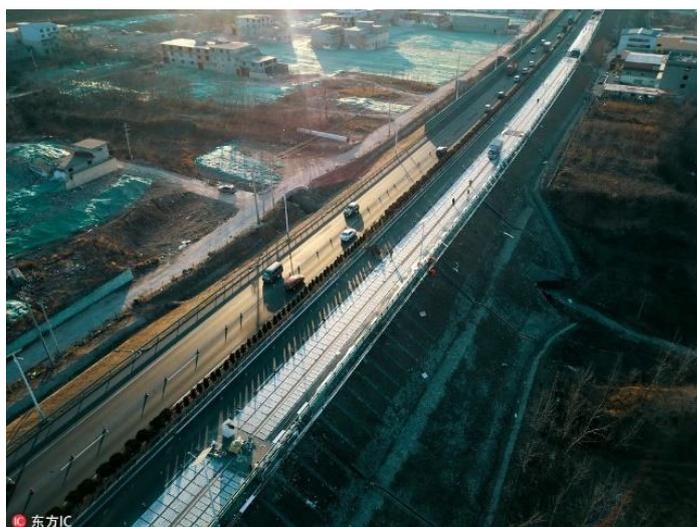
## China's First Solar Highway

China has constructed the country's first solar highway, in which solar panels are placed underneath transparent concrete.

### About the solar highway:

The solar highway is a 2 km (1.2 mile) stretch of road located on the Jinan City Expressway, and it's divided into three layers. The see-through concrete shields an array of solar panels of two sizes. Beneath the solar panels is a layer that will keep them isolated from the damp ground.

The expressway can handle 10 times more pressure than the normal asphalt variety and in a year generate 1 million kWh of electricity, which will be used to power street lights and a snow-melting system on the road. It's also designed to supply power to charging stations for electric vehicles, should those be added in the future.



**Facts for Prelims:**

China is billing the project as the world's first photovoltaic highway. In late 2016, a village in France opened what it claimed was the world's first solar-panel road, running for about the same length as China's new stretch though covering about half the area. In 2014, the Netherlands built a bike path embedded with solar panels.

**Way ahead:**

Solar roadways may have their critics (they are susceptible to being covered by dirt and other debris), but as their efficiency and applications improve, they're sure to prove their value. And with EVs becoming more popular, the world's going to need more ways to keep their vehicles charged and ready to go.

Sources: the hindu.

## Bio-CNG

**Context:** To promote the use of clean fuel, the oil ministry plans to set up bio-CNG (compressed natural gas) plants and allied infrastructure at a cost of Rs7,000 crore. The oil ministry will be working with state-run oil and gas retailers to set up the plants over the next two years. The government's plan is to make India a gas-based economy.

**What is Bio- CNG?**

Bio-CNG is a purified form of biogas with over 95% pure methane gas. It is similar to natural gas in its composition (97% methane) and energy potential. While natural gas is a fossil fuel, bio-CNG is a renewable form of energy produced from agricultural and food waste. Bio-CNG is being looked at as an environment-friendly alternative to diesel.

**How is CNG generated from agricultural waste?**

The process of generating CNG from agricultural waste involves treating the waste matter with a special bacterial solution, and then the gas which is generated is cleaned and compressed so that it can be used in vehicles.

**Benefits of Bio- CNG:**

The **cost of production** of 1kg of bio-CNG could be Rs15-20, **cheaper** than CNG, petrol and diesel. Besides, it will help in **reducing** the country's **import** of diesel up to 50%. It is also pollution free.

**Background:**

India currently imports one-third of its energy requirement. The world's third-largest crude oil importer is targeting halving its energy import bill by 2030. The government aims to increase the contribution of gas in India's energy mix to 15% from the current 6.5%.

Sources: livemint.

**Paper 3 Topic:** Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

## China's DAMPE probe

**Context:** A Chinese satellite which was sent to the skies to look for evidence of the annihilation or decay of dark matter particles in space has detected unexpected and mysterious signals in its measurement of high-energy cosmic rays, bringing scientists closer to proving the existence of the invisible matter. The mysterious dark matter is believed to comprise a quarter of universe.

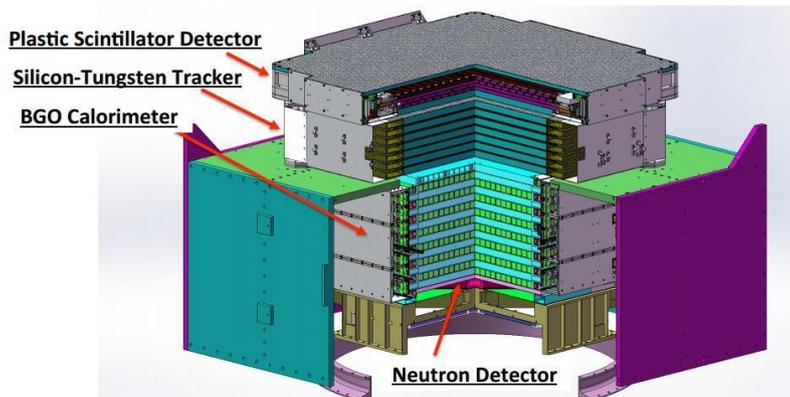
The satellite, Dark Matter Particle Explorer (DAMPE), also called Wukong or "Monkey King", has measured more than 3.5 billion cosmic ray particles with the highest energy up to 100 tera-electron-volts (TeV), including 20 million electrons and positrons, with unprecedented high energy resolution, Xinhua reported.

**Significance of these findings:**

Precise measurement of cosmic rays, especially at the very high energy range, are important for scientists to look for traces of dark matter annihilation or decay, as well as to understand the universe's most energetic astrophysical phenomena, such as pulsars, active galaxy nuclei and supernova explosions.

**What is Dark Matter?**

Dark matter is one of the great riddles of physics. While normal matter – making up the stars and planets and so on – is understood to account for just four percent of the mass-energy density of the universe, dark matter is believed to make up a quarter, yet its nature is unknown and yet to be detected. Its existence has been postulated through observations of the cosmos and, though elusive, it is key to the formation of the galaxies and structure of the universe.

**About DAMPE:**

DAMPE, short for DArk Matter Particle Explorer, was designed to look for clues to support one hypothesis for dark matter, which claims it consists of weakly interacting massive particles, or WIMPs. The idea for DAMPE was to collect the high energy cosmic ray electrons and anti-matter counterpart positrons, which are emitted by phenomena such as supernovae and pulsars.

Sources: the hindu.

## ‘Petro’ cryptocurrency

**Context:** Venezuelan has launched its own cryptocurrency, called the “Petro,” which will be backed by the country’s vast natural resource reserves. The country has also approved the creation of a Blockchain Base observatory to oversee the development and rollout of the new cryptocurrency.

**Background:**

OPEC member Venezuela boasts the largest proven reserves of crude oil in the world, but has struggled against the plunge in oil prices which began in 2014.

**Purpose of Petro:**

The purpose of Petro will be to advance the country’s monetary sovereignty, to carry out financial transactions and to defeat the financial blockade against the country.

**Value of Petro:**

The value of the new cryptocurrency will be pegged to the country’s vast reserves of oil and gas as well as its mineral wealth, including gold.

**Way ahead:**

- With the new cryptocurrency, Venezuela hopes it can overcome the economic blockade which the U.S. has put on the country. The blockade has caused the country’s national currency, the Bolivar, to lose around 57% of its value in the last four weeks.
- While it’s great to see yet another country deciding to set up a national cryptocurrency, Venezuela will likely garner some friction from the U.S. over the move. The Trump administration has already been railing against Venezuela and its socialist leadership in-between tirades against Iran and North Korea.

**What you need to know about the cryptocurrencies?**

Founded as a peer-to-peer electronic payment system, cryptocurrencies enable transfer of money between parties, without going through a banking system. These digital payment systems are based on cryptographic proof of the chain of transactions, deriving their name, Cryptocurrency. These employ cryptographic algorithms and functions to ensure anonymity (privacy) of the users (who are identified by an alphanumeric public key), security of the transactions and integrity of the payment systems. “Decentralised Digital Currency” or “Virtual Currency” is also interchangeably used for a cryptocurrency.

**How are they used?**

Cryptocurrency is fundamentally a decentralised digital currency transferred directly between peers and the transactions are confirmed in a public ledger, accessible to all the users. The process of maintaining this ledger and

validating the transactions, better known as mining, is carried out in a decentralised manner. The underlying principle of the authenticity of the present to historical transactions is cryptographic proof, instead of trust; different from how it happens in the case of traditional banking systems.

Sources: the hindu.

## Clinical trials

**Context:** With a huge talent pool and growing demand for innovation in drugs and medical devices to address the rising disease burden, the demand for the creation of a favorable environment for clinical trials in the country has once again come to the fore.



### **Need for local clinical trials:**

Epidemiological transition, in recent decades, compounded with the burgeoning population as well as widespread malnutrition and poverty, have resulted in the steep rise in both communicable and non-communicable diseases in the country, across all age groups. To counter this rising burden of disease, there is a compelling need for local clinical trials.

After a peak in 2009-2010, the clinical research sector in India is continually contracting. India represents 17.5% of the world's population but conducts only 1.4% of global clinical research. This is unfortunate, considering we have all the requisite factors, such as English-speaking health-care professionals, a large number of experts, steady economic growth, access to world-class technologies, strong IT- and data-management infrastructure, access to ethnically diverse patient populations and competitive operational costs. All these factors present clear advantages for clinical research.

### **Roadblocks:**

- India has been lagging in this area primarily because the regulatory system in India for clinical research has become increasingly a deterrent for biopharmaceutical- and device-companies which sponsor clinical trials. The existing legal framework lacks credibility, in terms of predictability and transparency, in the criteria and protocols governing clinical research.
- Clinical trials also seem to be misunderstood in the media and have sometimes been portrayed as experimental procedures, where new products are being unsafely tested on people.

- There have also been instances of lapses in confidentiality or non-adherence to protocols or shortcomings in getting informed consent from participants and these are to be totally condemned. Because of this they have received wide support.

#### **Recent push by the government:**

- Recognising the importance of local clinical trials in developing better and safer drugs, the Government of India is now working on new policies that could ensure swift approvals to begin clinical trials without making compromises on patient safety.
- The Government has taken steps such as recognising ethics committees, centralising a system whereby adverse side-effects can be appropriately investigated by the Drugs Controller General of India and formally recognising centres which are capable of conducting clinical trials in accord with regulations.
- To further speed up the availability of new and effective drugs, the Government has proposed waiving off clinical trials for those drugs that have already proved their efficacy in developed markets.

#### **Way ahead:**

Health research is not only crucial to the development of new diagnostic tools and treatments, it goes on to guiding the planning of health-care services in the appropriate direction, facilitating continuous evaluation and improvement of medical care, and allowing a thorough investigation of risk factors and disease associations. Therefore, Improvements in the overall policy environment can have a significant impact on attracting and securing greater investment and the associated economic gains.

To reap the benefits of clinical trials, our objective should be to bring about more clinical research in the country while maintaining high standards to ensure patient safety and accuracy of data.

Sources: the hindu.

## Sentinel satellite

**Context:** Sentinel- 5P, a European satellite tracking the levels air pollutants around the world has beamed back new views of the Earth's atmosphere, including images of pollution drifting away from power plants in India. The worst of this pollution runs from north of Patna in Bihar to south of Raipur in Chhattisgarh. The Sentinel-5P satellite is designed to make daily global maps of the gases and particles that pollute the air.

#### **About the Sentinel- 5P satellite:**

Sentinel-5P is the latest spacecraft in a fleet of Earth observers being commissioned by the European Union and the European Space Agency. It was launched into an 824 kilometre high orbit by a Russian rocket on October 13 this year. When fully operational, the new Sentinel will be an extremely powerful tool to monitor air quality.

It carries an instrument called Tropomi – a spectrometer that observes the reflected sunlight coming up off the Earth, analysing its many different colours. This helps detect the presence of trace gases such as nitrogen dioxide, ozone, sulphur dioxide, methane, and carbon monoxide in the atmosphere.

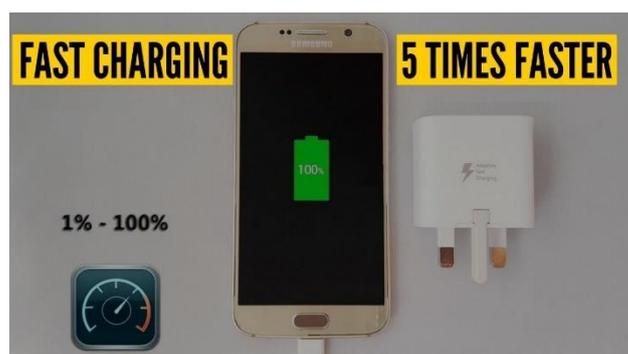
Sources: the hindu.

## New graphene-based battery

**Context:** Samsung Electronics has developed core battery technology using graphene to make lithium-ion batteries last longer and charge more quickly, a potential industry milestone if mass produced.

#### **Significance of this breakthrough:**

Standard lithium batteries require charging time of at least an hour to fully charge, even with quick charging technology, so numerous attempts to explore new innovative materials have been started.



Among the materials looked at, graphene, a material with high strength and conductivity, has widely become the primary source of interest. In theory, a battery based on the “graphene ball” material requires only 12 minutes to fully charge.

#### About Graphene:

Graphene has been touted in the global electronics industry as a “miracle material” given its **strength, electrical conductivity and elasticity**, and has been seen as an alternative to lithium-ion batteries since its discovery in 2004. It is a form of carbon that can be used to develop smaller, slimmer batteries but with higher capacity.

- Graphene is a carbon material that is one atom thick. Its thin composition and high conductivity means it is used in applications ranging from miniaturised electronics to biomedical devices. These properties also enable thinner wire connections; providing extensive benefits for computers, solar panels, batteries, sensors and other devices.
- The potential applications of graphene include water filtration and purification, renewable energy, sensors, personalised healthcare and medicine, to name a few.
- Graphene has excellent electronic, mechanical, thermal and optical properties as well. Its uses range from improving battery performance in energy devices, to cheaper solar panels.

Sources: the hindu.

## VoLTE services

**Context:** Telecom major Bharti Airtel, as part of expanding its services, has launched Voice over Long Term Evolution (VoLTE) facility for its customers in Chennai. Airtel VoLTE works over 4G services that will enable customers across the city to enjoy HD quality voice calls with faster call set up time.



Airtel to launch VoLTE services pan-India

#### Background:

Indian telecom players are battling tooth and nail to retain their competitive position in the market and VoLTE (Voice over Long Term Evolution) is their new mantra. It promises faster, better and wider data connectivity. India is witnessing a VoLTE revolution thanks to the competition stirred up by Reliance Jio.

#### What is VoLTE?

VoLTE stands for voice over Long Term Evolution. VoLTE is an Internet Protocol Multimedia Subsystem (IMS) specification which enables a variety of services to operate seamlessly on the network rather than having to switch to different applications for voice or video.

#### How it works?

VoLTE is a technology update to the LTE protocol used by mobile phone networks. Under LTE, the infrastructure of telecom players only allows transmission of data while voice calls are routed to their older 2G or 3G networks. This is why, under LTE, one cannot access 4G data services while on a call. This leads to problems such as slow internet speeds and poor voice clarity. VoLTE allows voice calls to be ‘packaged’ and carried through LTE networks. This would mean 4G data accessibility even during calls.

#### Benefits of VoLTE:

- VoLTE provides a more efficient use of spectrum than traditional voice and increases handset battery life.
- VoLTE ensures that video services are fully interoperable across the operator community, just as voice services are, as demand for video calls grows.

Sources: the hindu.

## Plants that can glow

### Context:

MIT scientists have found a way to induce plants to give off dim light by embedding specialised nanoparticles into their leaves, a major step towards using plants to illuminate the workspace. This technology could also be used to provide low-intensity indoor lighting, or to transform trees into self-powered streetlights.

### Background:

To create the glowing plants, scientists relied on luciferase, the enzyme that gives fireflies their glow. Luciferase acts on a molecule called luciferin, causing it to emit light. Another molecule called co-enzyme A helps the process along by removing a reaction byproduct that can inhibit luciferase activity.



Researchers packaged each of these three components into a different type of nanoparticle carrier.

The nanoparticles, which are all made of materials that the US Food and Drug Administration classifies as “generally regarded as safe,” help each component get to the right part of the plant. They also prevent the components from reaching concentrations that could be toxic to the plants.

### How plants were made to glow?

To get the particles into plant leaves, the researchers first suspended the particles in a solution. Plants were immersed in the solution and then exposed to high pressure, allowing the particles to enter the leaves through tiny pores called stomata.

Particles releasing luciferin and coenzyme A were designed to accumulate in the extracellular space of the mesophyll, an inner layer of the leaf, while the smaller particles carrying luciferase enter the cells that make up the mesophyll.

The particles gradually release luciferin, which then enters the plant cells, where luciferase performs the chemical reaction that makes luciferin glow.

Sources: the hindu.

## Deep learning neural networks

**Context:** Scientists have announced the discovery of two new exoplanets, Kepler-90i and Kepler-80g. With this discovery, it is now clear that there is another star besides the Sun that has eight planets orbiting it.

### Use of Deep learning neural networks:

The new exoplanets have been discovered using a deep learning neural network — an artificial intelligence tool that mimics the workings of a human brain.

- Scientists “trained” their computer to analyse light readings made by NASA’s Kepler Space Telescope, which are archived and made available for anyone to use. During its mission from 2009 to 2013, the Kepler Space Telescope surveyed nearly 200,000 stars, with 35,000 possible planet signals. The network was made to learn to identify true signals using 15,000 previously vetted signals.
- They then studied the weaker signals recorded from 670 star systems that had multiple known planets orbiting them, finally coming up with this discovery. The network also identified another Earth-sized exoplanet, Kepler 80g, orbiting the star Kepler 80. This is a very stable system in which Kepler 80g and four of its neighbours are locked together in a so-called resonant chain.

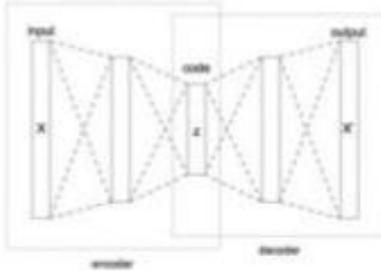
### What is Deep Learning?

Deep learning is a machine learning technique that teaches computers to do what comes naturally to humans: learn by example. In deep learning, a computer model learns to perform classification tasks directly from images, text, or sound. Deep learning models can achieve state-of-the-art accuracy, sometimes exceeding human-level performance. Models are trained by using a large set of labeled data and neural network architectures that contain many layers.

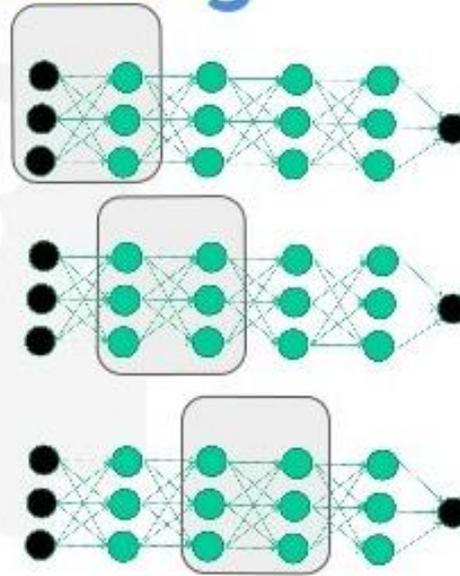
# Deep learning

Train in steps as **autoencoders**.

having an input layer, an output layer and one or more hidden layers connecting them – , but with the output layer having the same number of nodes as the input layer, and with the purpose of *reconstructing its own inputs*



By making this happen with (many) fewer units than the inputs, this forces the 'hidden layer' units to become good feature detectors



BRAINCREATORS

## Applications:

Deep learning is a key technology behind driverless cars, enabling them to recognize a stop sign, or to distinguish a pedestrian from a lamppost. It is the key to voice control in consumer devices like phones, tablets, TVs, and hands-free speakers. Deep learning is getting lots of attention lately and for good reason. It's achieving results that were not possible before.

## What's the Difference Between Machine Learning and Deep Learning?

- Deep learning is a specialized form of machine learning. A machine learning workflow starts with relevant features being manually extracted from images. The features are then used to create a model that categorizes the objects in the image. With a deep learning workflow, relevant features are automatically extracted from images. In addition, deep learning performs “end-to-end learning” – where a network is given raw data and a task to perform, such as classification, and it learns how to do this automatically.
- Another key difference is deep learning algorithms scale with data, whereas shallow learning converges. Shallow learning refers to machine learning methods that plateau at a certain level of performance when you add more examples and training data to the network.
- A key advantage of deep learning networks is that they often continue to improve as the size of your data increases.

Sources: the hindu.

## AP signs MoU with Google

**Context:** X, a division owned by Google's parent company Alphabet and one that deals in experimental technologies, has signed a MoU with Andhra Pradesh government to setup developmental centre in Visakhapatnam and to create a high speed internet network that doesn't require special cabling.

### About the project:

No cables will be used. Instead of cables, the X internet network will use “Free Space Optical Communications, aka FSOC, technology”. This network will power internet in 13 districts through 2 thousand FSOC links. The X centre in Visakhapatnam will be its first development centre outside the US.

### What is FSOC technology?

FSFC is an optical communication technology that uses light to wirelessly transmit data to telecommunication and internet applications. The technology remained outside the commercial applications for long owing to distance, speed, and efficiency related problems.

**How FSOE technology works?**

FSOE links use beams of light to deliver high-speed, high-capacity connectivity over long distances, just like fiber optic cable, but without the cable. And because there's no cable, this means there's none of the time, cost, and hassle involved in digging trenches or stringing cable along poles. FSOE boxes can simply be placed kilometres apart on roofs or towers, with the signal beamed directly between the boxes to easily traverse common obstacles like rivers, roads and railways.

**Background:**

Less than 20% of people in Andhra Pradesh currently have access to broadband connectivity. The state government has committed to connecting 12 million households and thousands of government organizations and businesses by 2019 – an initiative called AP Fiber Grid.

**About Google X:**

Founded by Google in 2010 as Google X with an aim to work on finding solutions to the world's large problems, this American semi-secret advanced technology lab facility became an independent Alphabet company and was renamed as X after Google was restructured into Alphabet in the year 2015. It has been working on several projects including driver-less car, product delivery through flying vehicles, Project Loon, Google glass among other technologies.

Sources: the hindu.

## Blockchain technology

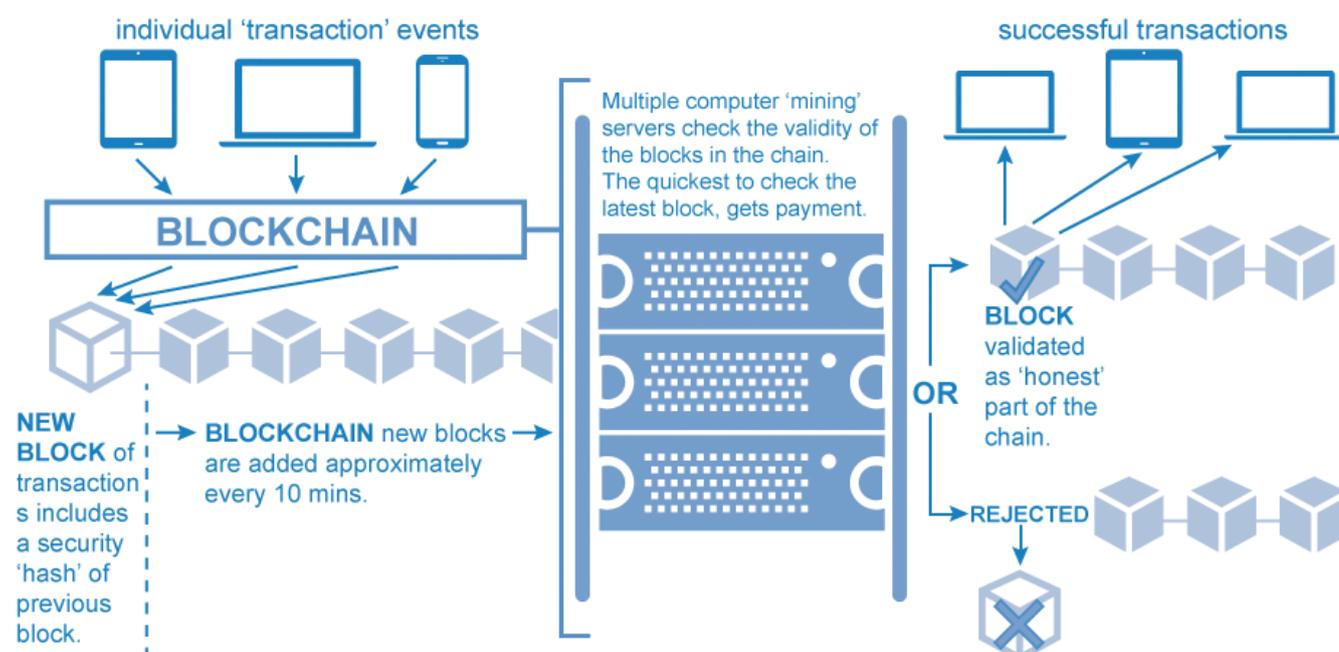
**Context:** The West Bengal government is planning to introduce the blockchain technology to protect its documents from cyber attacks.

**Key facts:**

- The state government's proposed Cyber Security Centre of Excellence would be entrusted to execute the new 'blockchain' mechanism at various departments.
- The cyber security centre will bring the best in academic, law enforcement and other sections under one roof for the best practices to counter cyber crimes.
- The centre will also conduct research and development on cyber crimes for which the state government will partner with private firms.

**Background:**

Recently, computers at some offices of the West Bengal State Electricity Distribution Company Limited were crippled by 'WannaCry' virus, a global ransomware. Ransomware is a type of malicious software designed to block access to a computer system until a sum of money is paid.



**What is Blockchain?**

Blockchain is an online ledger of digitally recorded transactions which is encrypted in the form of blocks, each of which is connected by a network of computers.

**How it works?**

Blockchain enables two entities that do not know each other to agree that something is true without the need of a third party. As opposed to writing entries into a single sheet of paper, a blockchain is a distributed database that takes a number of inputs and places them into a block. Each block is then 'chained' to the next block using a cryptographic signature. This allows blockchains to be used as a ledger which is accessible by anyone with permission to do so. If everyone in the process is pre-selected, the ledger is termed 'permissioned'. If the process is open to the whole world, the ledger is called unpermissioned.

**Benefits of blockchain technology:**

A blockchain is anonymous, protecting the identities of the users. This makes blockchain a more secure way to carry out transactions. The algorithm used in blockchain reduces the dependence on people to verify the transactions.

Sources: the hindu.

## Reservoir computing system

Scientists have developed a new type of neural network chip that can dramatically improve the efficiency of teaching machines to think like humans. The network is called- Reservoir Computing System.

**How was it created?**

Researchers from University of Michigan in the US created their system using memristors, which require less space and can be integrated more easily into existing silicon-based electronics. *Memristors are a special type of resistive device that can both perform logic and store data.*

**How it works?**

- Researchers used a special memristor that memorises events only in the near history. Inspired by brains, neural networks are composed of neurons, or nodes, and synapses, the connections between nodes.
- To train a neural network for a task, a neural network takes in a large set of questions and the answers to those questions. In this process of what's called supervised learning, the connections between nodes are weighted more heavily or lightly to minimise the amount of error in achieving the correct answer.
- Once trained, a neural network can then be tested without knowing the answer. For example, a system can process a new photo and correctly identify a human face, because it has learned the features of human faces from other photos in its training set.

**Significance of the system:**

Reservoir computing systems built with memristors can skip most of the expensive training process and still provide the network the capability to remember. This is because the most critical component of the system – the reservoir – does not require training.

When a set of data is inputted into the reservoir, the reservoir identifies important time-related features of the data, and hands it off in a simpler format to a second network. This second network then only needs training like simpler neural networks, changing weights of the features and outputs that the first network passed on until it achieves an acceptable level of error.

**Applications:**

The system can predict words before they are said during conversation, and help predict future outcomes based on the present.

Sources: the hindu.

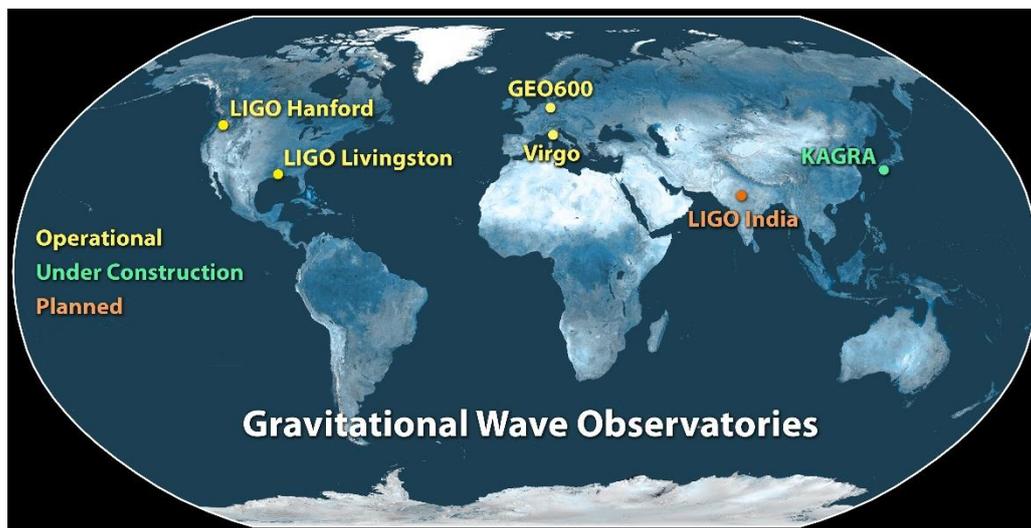
## India to have its own gravitational wave detector in 2025

A new LIGO gravitational wave detector to measure ripples in the fabric of space and time is set to be built in India by 2025, in collaboration with universities from across the globe. The new Laser Interferometer Gravitational-Wave Observatory (LIGO) detector will add to the two already operational in the US.

**Significance of this move:** A third LIGO detector will help pinpoint the origin of the gravitational waves that are detected in future.

### Background:

The LIGO detectors discovered the first gravitational waves produced by two giant merging blackholes last year. The research won a Nobel Prize in Physics this year.



### About LIGO:

The observatory, described as “the most precise measuring device ever built,” is actually two facilities in Livingston, Louisiana, and Hanford, Washington. They were built and operated with funding from the National Science Foundation, which has spent \$1.1 billion on LIGO over the course of several decades.

The project is led by scientists from the California Institute of Technology and the Massachusetts Institute of Technology, and is supported by an international consortium of scientists and institutions.

### What are Gravitational Waves?

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

### Why they are useful?

These waves will be particularly useful for studying black holes (the existence of which was first implied by Einstein’s theory) and other dark objects, because they’ll give scientists a bright beacon to search for even when objects don’t emit actual light.

With this, mapping the abundance of black holes and frequency of their mergers could get a lot easier. Since they pass through matter without interacting with it, gravitational waves would come to Earth carrying undistorted information about their origin. They could also improve methods for estimating the distances to other galaxies.

### Why it is difficult to detect these waves?

The reason that gravitational waves have been so difficult to detect is that their effects are tinier than tiny. In fact, the signals they produce are so small that scientists struggle to remove enough background noise to confirm them.

### Einstein’s prediction:

Albert Einstein predicted gravitational waves in his general theory of relativity a century ago. Under this theory, space and time are interwoven into something called “spacetime”. Einstein predicted that mass warps space-time through its gravitational force.

When objects with mass accelerate, such as when two black holes spiral towards each other, they send waves along the curved space-time around them at the speed of light, like ripples on a pond. The more massive the object, the larger the wave and the easier for scientists to detect. Gravitational waves do not interact with matter and travel through the Universe completely unimpeded.

Sources: the hindu.

## SOFIA - NASA's flying telescope

**Context:** NASA's flying observatory Sofia is preparing for its 2018 campaign, which will include, among others, observations of celestial magnetic fields, star-forming regions, comets and Saturn's giant moon Titan. This will be the fourth year of full operations for Sofia, short for Stratospheric Observatory for Infrared Astronomy, with observations planned between February 2018 and January 2019.

### **Significance of the observations:**

Scientists believe that the observatory's investigations will help them understand how magnetic fields affect the rate at which interstellar clouds condense to form new stars. These observations could also help them learn whether the luminosity of these active black holes is driven by star formation or accretion of material onto the central black hole. Sofia will also conduct observations to better understand how methane levels change with seasons on Mars.

### **About Sofia:**

**What is it?** Sofia is a Boeing 747SP jetliner modified to carry a 100-inch diameter telescope. It is a joint project of NASA and the German Aerospace Centre, DLR. SOFIA is designed to observe the infrared universe.

SOFIA studies many different kinds of astronomical objects and phenomena, but some of the most interesting are:

- Star birth and death.
- Formation of new solar systems.
- Identification of complex molecules in space.
- Planets, comets and asteroids in our solar system.
- Nebulae and dust in galaxies (or, Ecosystems of galaxies).
- Black holes at the center of galaxies.

### **Why does NASA need a flying telescope?**

Water vapor blocks infrared light energy and 99% of the world's water vapor exists below 39,000 feet. So, the higher altitude you fly, the drier it gets and the more optimal it is for infrared observation.

Sources: et.

**Paper 3 Topic:** Conservation, environmental pollution and degradation, environmental impact assessment.

## Strategy on Resource Efficiency (RE)

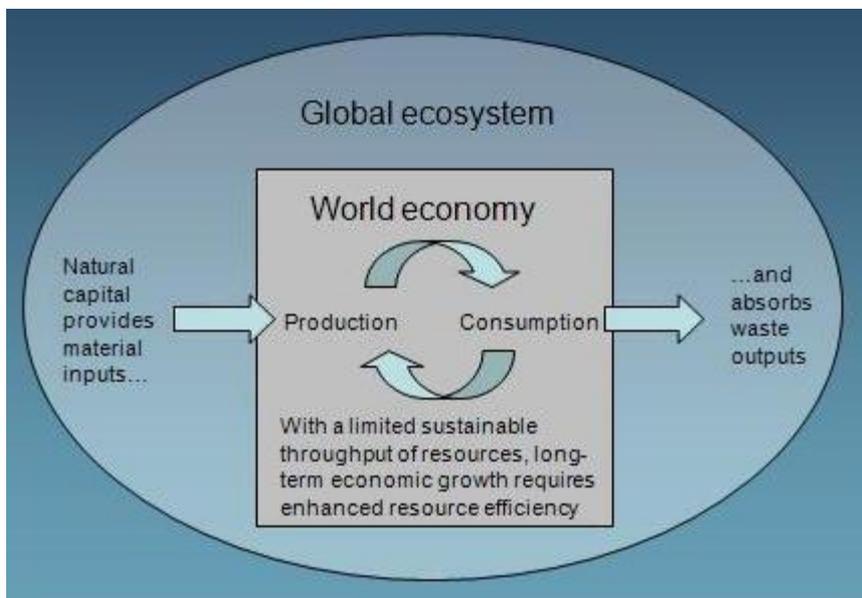
**Context:** NITI Aayog in collaboration with the European Union delegation to India have released the Strategy on Resource Efficiency. The strategy aims to promote resource efficiency in India.

- This strategy is the first policy document to emphasize resource productivity in the country. The Strategy emphasizes on Sustainable Public Procurement (SSP) as an action agenda which will be the market transformation tool to transform to a resource efficient economy.
- The document is developed with the recommendations from the Indian Resource Efficiency Programme (IREP), launched by the Indian Ministry of Environment, Forests and Climate Change (MoEFCC) and Indian Resource Panel (InRP) in April 2017.

### What is Resource Efficiency and why do we need it?

Resource efficiency very simply put is making more with fewer materials. In practice, through a life-cycle approach, it leads to minimizing impact on environment & the associated societal burdens, transforming 'waste' into 'resources' fostering circular economy, and strengthening resource security.

Resource Efficiency and Circular Economy are important goals and central principles for achieving sustainable development. Sustainability is a global priority and SDGs commitment and 11th Five year plan also clearly enunciate importance of Resource efficiency (RE).



### Way ahead:

India's large population, rapid urbanization and expanding industrial production have led to exploitation of available limited natural resources with concerns regarding resource depletion and future availability becoming more pronounced. Ensuring resource security requires an integrated, concerted and collaborative approach in order to fulfill the needs of a vast and growing population. Also, the environmental burdens emanating due to resource extraction, utilization and disposal, including land degradation, biodiversity loss, as well as air and water pollution remain of great concern. Enhancing resource efficiency (RE) and promoting the use of secondary raw materials (SRM) is a pertinent strategy to address these challenges and reduce dependence on primary resource.

### Facts for Prelims:

**About InRP:** The new Indian Resource Panel (InRP) was officially unveiled in 2016, making India one of the first emerging economies to set up a national advisory body on resource efficiency. The InRP was created with support from the International Climate Initiative as part of the project 'Resource efficiency and secondary raw materials management as a contribution to climate change mitigation'. The InRP will issue recommendations to Indian businesses and policy-makers on improving the general conditions for resource efficiency.

Sources: pib.

## Clean Sea-2017

**Context:** The Regional Level Marine Oil Pollution Response Exercise titled 'Clean Sea – 2017', was recently conducted at sea off Port Blair.

**The objective of the exercise** was to ascertain preparedness of the Indian Coast Guard, resource agencies and other stakeholders in responding to a major oil spill in line with the provisions of NOS-DCP (National Oil Spill Disaster Contingency Plan).

### Background:

Indian Coast Guard is responsible for marine environment protection in the maritime zones of India and is the coordinating authority for response to oil spills in Indian waters. The Force has drawn up a National Oil Spill Disaster Contingency Plan (NOSDCP) and has established three pollution response centres at Mumbai, Chennai and Port Blair.



### National Oil Spill Disaster Contingency Plan:

India promulgated National oil spill Disaster contingency plan (NOS-DCP) in the year 1996. Coast guard was designated as central coordination authority.

**The objectives of the plan are:**

- To develop appropriate and effective systems for the detection and reporting of spillage of oil.
- To ensure prompt response to prevent, control, and combat oil pollution.
- To ensure that adequate protection is provided to the public health and welfare, and the marine environment.
- To ensure that appropriate response techniques are employed to prevent, control, and combat oil pollution, and dispose off recovered material in an environmentally accepted manner.
- To ensure that complete and accurate records are maintained of all expenditure to facilitate cost of recovery.

Sources: the hindu.

## Certificate of Commendation to WCCB

India has been awarded with the Certificate of Commendation for its exemplary enforcement action in its regional and global effort to combat illegal wildlife trade. The award has been given to Wildlife Crime Control Bureau by the Secretary General of Convention on International Trade in Endangered Species of Wild Fauna and Flora.

India was the only recipient of the Certificate of Commendation at the recently held 69th Standing Committee meeting of CITES at Geneva.

**Operation Save Kurma:**

The award has been presented to WCCB for its efforts in conducting and coordinating a species specific wildlife enforcement Operation, codenamed "Operation Save Kurma". "Operation Save Kurma" was conducted in the country by the WCCB to combat the proliferating illegal trade in live turtles and its parts from the country to destinations abroad. The operation was also aimed to invite attention of the enforcement agencies towards such illegal trade. During the 'Operation Save Kurma' conducted from December 15, 2016 to January 30, 2017, approximately 16, 000 live turtles/tortoises were seized and released back into the wild.

**About WCCB:**

The Government of India constituted a statutory body, the Wildlife Crime Control Bureau (WCCB) on 6 June 2007, by amending the Wildlife (Protection) Act, 1972. It was established to combat organized wildlife crime in the country.

**Functions:**

Under the Wild Life (Protection) Act, 1972, it is mandated to collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to State and other enforcement agencies for immediate action so as to apprehend the criminals; to establish a centralized wildlife crime data bank; co-ordinate actions by various agencies in connection with the enforcement of the provisions of the Act.

It will also assist State Governments to ensure success in prosecutions related to wildlife crimes and advise the Government of India on issues relating to wildlife crimes having national and international ramifications, relevant policy and laws. It also assists and advises the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

Sources: pib.

## Petcoke imports from US will choke India further: Experts

**Context:** India has emerged as the biggest importer of U.S. oil refinery by-product 'petcoke'. U.S. oil refineries that are unable to sell a dirty, fuel waste product at home are exporting vast quantities of it to India instead. Refineries are sending it around the world, especially to energy-hungry India, which last year got almost a fourth of all the fuel-grade "petcoke" the U.S. shipped out. In 2016, the U.S. sent more than 8 million metric tonnes of petcoke to India.

**What is petcoke?**

Petroleum coke, the bottom-of-the-barrel leftover from refining Canadian tar sands crude and other heavy oils, is cheaper and burns hotter than coal. But it also contains more planet-warming carbon and far more heart- and lung-damaging sulphur.

**Concerns:**

The petcoke burned in factories and plants is contributing to dangerously filthy air in India, which already has many of the world's most polluted cities. It contains 17 times more sulfur than the limit set for coal, and a staggering 1,380 times more than for diesel.

**Rising petcoke imports:**

Indian purchases of US fuel-grade petcoke skyrocketed two years ago after China threatened to ban the import of high-sulfur fuels. Although Indian factories and plants buy some petcoke from Saudi Arabia and other countries, 65% of imports in 2016 were from the US.

- India's cement companies were first to bring in petcoke, and still import the most, though cement experts say some sulfur is absorbed during manufacturing. As word spread of the cheap, high-heat fuel, other industries began using it in their furnaces — producing everything from paper and textiles to brakes, batteries and glass.
- Petcoke's use was further encouraged by low import tariffs and a lack of regulations on its most potent pollutants. Industries also like that petcoke, which is around 90% carbon, burns hot. So they can use less of it to produce the same heat as coal — though coal still overshadows petcoke in factory furnaces.
- Within a decade, India's petcoke appetite grew so voracious that it began producing and selling its own, and Indian refineries today are making about as much as the country is importing.

**Need for regulation:**

The country has seen a dramatic increase in sulfur dioxide and nitrogen dioxide emissions in recent years, concentrated in areas where power plants and steel factories are clustered. Those pollutants are converted into microscopic particles that lodge deep in the lungs and enter the bloodstream, causing breathing and heart problems.

Petcoke, critics say, is making a bad situation worse across India. About 1.1 million Indians die prematurely as a result of outdoor air pollution every year, according to the Health Effects Institute, a nonprofit funded by the U.S. Environmental Protection Agency and industry.

**Institutional measures:**

The government's environment ministry has dismissed the idea that petcoke threatens public health in the nation's capital. But the country's Supreme Court, which has consistently demanded or enacted tougher pollution control measures, recently banned petcoke use by some industries as of November 1 in the three states surrounding pollution-choked New Delhi. It also demanded tighter pollution standards that if enforced could further limit its use nationwide.

Sources: the hindu.

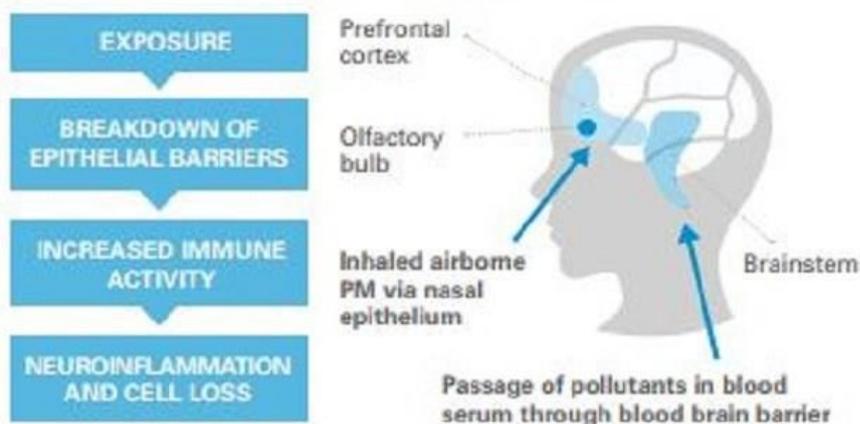
## UNICEF report on air pollution

The UNICEF has released the report on air pollution titled- 'Danger in the air: How air pollution can affect brain development in young children'. The report has once again set alarm bells ringing about high levels of air pollution and its likely impact on brain development among infants.

**Highlights of the report:**

- Nearly 17 million infants worldwide live in areas where outdoor air pollution is at least six times higher than international limits. These babies are at a risk of suffering brain damage. Air pollution-related ailments has led to the deaths of over 920,000 children under the age of five every year.
- The threat is much higher in Asia. Nearly 16 million infants belong to Asia. Moreover, 75% of them live in the Indian subcontinent, which has three of the world's 10 most populated countries in the world — India,

**FIG.3** Possible channels through which air pollution may affect the brain



Bangladesh and Pakistan. In fact, India topped the list of countries with babies at risk, followed by China, the most populated country in the world.

- Focusing on the adverse effect on the development of brain among infants, the UNICEF report has found a direct relationship between exposure to air pollution and cognitive outcomes. Affected infants faced problems of low verbal and nonverbal IQ and memory, reduced test scores, grade point averages among school children, along with neurological behavioral issues.
- As per the report, Ultrafine pollution particles (particulate matter that is equal or less than 2.5 microns in diameter) pose an especially high risk because they can more easily enter the blood stream and travel through the body to the brain.
- The report also notes that harmful particles from magnetite, a form of an ore, is a leading cause for pollution in urban areas. As its particles are small, they easily penetrate humans through olfactory nerves and the gut. Magnetite nano particles are highly toxic to the brain due to their magnetic charge and their ability to help create oxidative stress – which is often the cause of neurodegenerative diseases.
- The report said that poly-cyclic aromatic hydrocarbons (PAHs), a kind of pollutants formed from fossil fuel combustion is responsible for loss of or damage to white matter in infant brains. As PAHs are commonly found in areas of high automobile traffic, the UNICEF report believed that urbanisation without adequate protection and pollution reduction measures will put more children at risk.

#### **Solutions offered by the UNICEF:**

- The UNICEF report urged citizens, especially in the developing world — South Asia and China — to be aware of the quality of air they breathe, and protect children from exposure to unhealthy air through protective masks or air filtration systems.
- Putting the onus of safety on the parents, the report urged them to provide their children with healthy and balanced diets to mitigate the threat from air pollution. But while parents can provide the first line of defence to vulnerable children, the UNICEF report also urged macro-level measures to tackle the menace of air pollution.
- In an apparent signal to municipal and political authorities to take action against the issue, the report also said that reducing air pollution means replacing fossil fuel combustion with cleaner, renewable sources of energy, including appropriate use of solar, wind and thermal sources.
- The report also urged modern-day town planners to focus on creating new models of urbanisation, which will take care of the rising pollution levels. Rapidly urbanising areas have an opportunity to bypass some of the older planning models and take advantage of sustainable, cleaner innovations. They can also lay the right foundations from the onset.

Sources: the hindu.

## **Electronic/electrical waste in India**

**Context:** The UN, in its latest report- Global E-waste Monitor 2017, has warned about the health and environmental dangers from the processing of e-waste — the discarded electronic and electrical material — by the informal sector in India without proper safeguards.

#### **The UN has made the following observations in its report:**

- Over 1 million poor people in India are involved in manual recycling operations, but “most of these people have very low literacy levels with little awareness of the dangers of the operations.
- Severe health impacts and environmental damage are widespread in India, due to the final step of the e-waste processing by the informal sector. The dangers come from “improper and unsafe treatment and disposal through open burning or in dumpsites.
- The value of recoverable precious materials like gold, silver, copper, platinum and palladium contained in last year’s e-waste was \$55 billion and much of it was going to waste.

#### **Background:**

- Domestically India produced 1.95 million tonnes of e-waste last year — or about 1.5 kg per person — and it also imports it from developed countries. Last year, the world produced 44.7 million tonnes of e-waste or 6.1 kg per

person, which is four times more than the e-waste produced by each Indian. Only 8.9 million tonnes — or 20 per cent — per cent of total global e-waste was recycled.

- E-waste includes a whole variety of small and large appliances, and electronic equipment including cell phones, TVs, refrigerators, air conditioners, computers and lamps, small appliance and large appliances, lamps.

#### Efforts by India:

A formal e-waste recycling sector is now being developed in major Indian cities and under the country's rules producers have extended responsibility for the handling the waste that ultimately results from their products. The main features of the regulations are a refundable deposit scheme that incentivises recycling and parallel to that is the creation of Producer Responsibility Organisations to handle the waste.

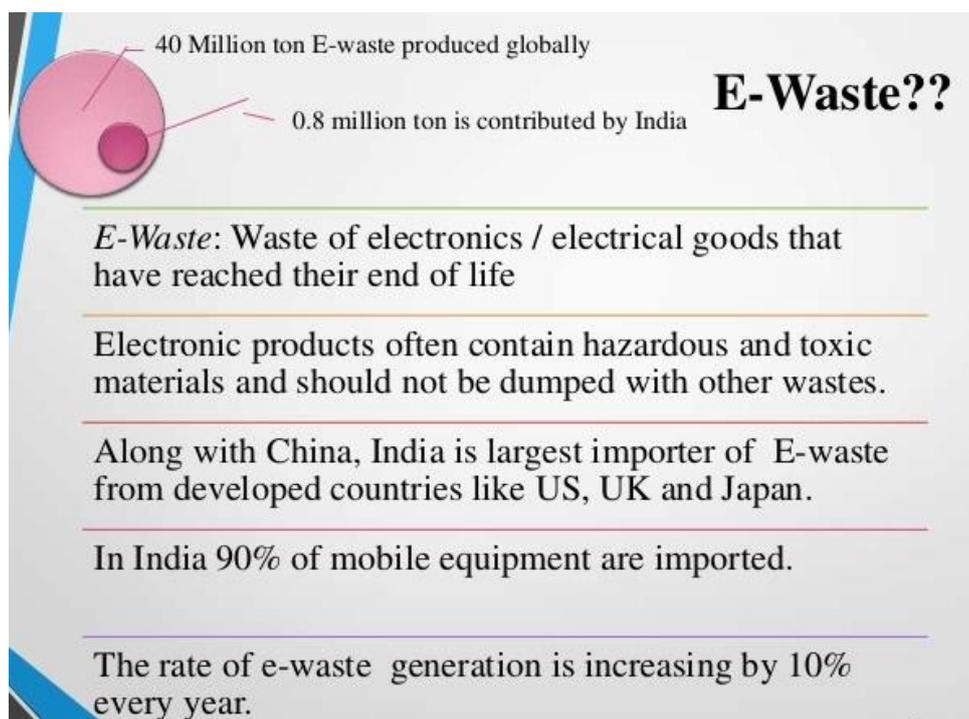
#### Why it is difficult to manage e waste in India?

- The producers/manufacturers do not have adequate information on their website regarding e waste management.
- Customer care representatives do not have inkling about any take back or recycling programme and even if they have set up collection centres, they are simply not enough for a geographically vast country like India.
- India being a vast country, setting up collection mechanism is a big challenge. If any of the brands try individually to reach out to all corners of the country, it will economically not be sustainable or feasible.
- Improper enforcement of the existing laws is another hurdle.

#### Way ahead:

Looking ahead, the problem could become more acute with cheaper cell phones and other equipment becoming available. This means that more people will be able to afford purchasing new equipment, and that more equipment will eventually be discarded. Therefore, there is need for developing systems to safely handle the e-waste and recycle it.

Sources: ET.



## ECO-NIWAS

#### Context:

On the Energy Conservation Day celebrated on **December 14<sup>th</sup>**, the government unveiled the interactive online portal, ECO-NIWAS (Energy Conservation – New Indian Way for Affordable & Sustainable homes) for increasing awareness to build sustainable and energy efficient homes in the country.

#### About the Energy Conservation Day:

The Energy Conservation Day is organized on 14th December each year by **Bureau of Energy Efficiency (BEE)**, under **Ministry of Power**, with an aim to demonstrate India's achievements in energy efficiency and conservation, while working for its ambition of holistic development as part of the nation's overall effort towards climate change mitigation.

#### National Energy Conservation Day



As part of its awareness outreach, BEE recognizes and encourages endeavours of industries in reducing energy consumption by felicitating them with National Energy Conservation Awards. BEE also awards prizes to the national winners of the annual National Painting Competition on Energy Conservation.

Sources: pib.

## Alien invasive animal species

**Context:** The Zoological Survey of India (ZSI) has for the first time compiled a list of alien invasive animal species, totalling 157. Of the 157 species, 58 are found on land and in freshwater habitats, while 99 are in the marine ecosystem. This compilation was announced on the sidelines of the National Conference on the Status of Invasive Alien Species in India, organised by the ZSI and the Botanical Survey of India (BSI).



### What are invasive animal species?

- Alien species become 'invasive' when they are introduced deliberately or accidentally outside their natural areas, where they out-compete the native species and upset the ecological balance. Invasive animal species pose a threat to biodiversity and human well-being.
- Common characteristics of invasive species include rapid reproduction and growth, high dispersal ability, phenotypic plasticity (ability to adapt physiologically to new conditions), and ability to survive on various food types and in a wide range of environmental conditions.

### Why Does it Matter?

Invasive alien species have invaded and affected native biota in almost every ecosystem type on Earth, and have affected all major taxonomic groups. In economic terms, the costs of invasive alien species are significant. Total annual costs, including losses to crops, pastures and forests, as well as environmental damages and control costs, have been conservatively estimated to be in the hundreds of billions of dollars and possibly more than one trillion. This does not include valuation of species extinctions, losses in biodiversity, ecosystem services and aesthetics.

Few examples:

- *Paracoccus marginatus* (Papaya Mealy Bug), which belongs to Mexico and Central America but is believed to have destroyed huge crops of papaya in Assam, West Bengal and Tamil Nadu.
- *Phenacoccus solenopsis* (Cotton Mealybug) is a native of North America but has severely affected cotton crops in the Deccan.
- *Pterygoplichthys pardalis* (Amazon sailfin catfish) has been destroying fish populations in the wetlands of Kolkata.
- *Achatina fulica* (African apple snail) is said to be most invasive among all alien fauna. It is a mollusc and was first reported in the Andaman and Nicobar Islands. But today it is found all across the country and is threatening the habitats of several native species.

### What is being done?

- In 2010 almost all of the world's governments adopted the Convention on Biological Diversity Strategic Plan for Biodiversity, which included 20 headline 'targets' referred to as the Aichi Targets. One of these targets (#9) is specifically related to IAS.
- "Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated and measures are in place to manage pathways to prevent their introduction and establishment".
- This international commitment to addressing IAS was re-affirmed in 2015 through the 2030 Agenda for Sustainable Development which includes 17 goals (SDGs) each with specific targets. The SDGs have nature woven throughout acknowledging that nature is fundamental to human well-being. One of the SDGs #15 Life on land, has a target focusing specifically on IAS.

- “By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species”

Sources: the hindu.

## Methanol Economy Fund

**Context:** **Niti Aayog** is planning to set up a Methanol Economy Fund worth Rs 4,000-5,000 crore to promote production and use of the clean fuel. The government think-tank is aiming at generation of the fuel by converting high ash content coal into methanol and such a plant is expected to be set up by Coal India.

Niti Aayog plans to move a Cabinet note soon on the methanol economy and the plans to set up production plants. It expects that two plants can be commissioned in the next 3-4 years.

### **Methanol as an alternative fuel:**

Methanol is a promising fuel as it is clean, cheaper than fossil fuels and a good substitute for heavy fuels. India imports methanol from Saudi Arabia and Iran at present. Across the world, methanol is emerging as a clean, sustainable transportation fuel of the future.

Methanol can be blended with gasoline in low-quantities and used in existing road vehicles, or it can be used in high-proportion blends such as M85-M100 in flex-fuel or dedicated methanol-fueled vehicles. Technology is also being commercialized to use methanol as a diesel substitute.

### **Why Methanol?**

- Methanol can be used as an energy producing fuel, transportation fuel and cooking fuel, cutting down India’s oil import bill by an estimated 20% over the next few years. Unlike CNG, using methanol as a transportation fuel would require minimal alteration in the vehicles.
- Methanol is a clean-burning fuel that produces fewer smog-causing emissions — such as sulphur oxides (SOx), nitrogen oxides (NOx) and particulate matter — and can improve air quality and related human health issues.
- Methanol is most commonly produced on a commercial scale from natural gas. It can also be produced from renewable sources such as biomass and recycled carbon dioxide.
- As a high-octane vehicle fuel, methanol offers excellent acceleration and power. It also improves vehicle efficiency.

Sources: Indian express.

## India unveils anti-smog cannon in fight against Delhi pollution

**Context:** With pollution levels in Delhi showing no signs of improvement and the city having smog as one of the main issues faced, the state government has introduced its latest weapon to combat the deadly smog. The Delhi government has tested ‘anti-smog guns in the capital to deal with the winter smog.



### **What is Anti-smog gun?**

Anti-smog gun is a device that sprays **atomised water** into the atmosphere to reduce air pollution. Connected to a water tank and mounted on a vehicle, the device could be taken across the city to spray water to settle dust and other suspended particles.

### **How it operates?**

The fog cannon, also dubbed as the ‘anti-smog cannon’, comprises a cylindrical drum with a tank to store water and a high-velocity exhaust fan. The water is pumped from the tank to the exhaust fan which blows out water in the form of micro droplets. The theory is that the sprayed water will cling on to the pollutants — particularly particulate matter PM2.5 and PM10 — and wash it down creating the effect of rain. The current trials will be used to find if the theory holds true.

**Background:**

This move is inspired by the Chinese water cannons that were used by the authorities there with some success. The idea is that it reduces air pollution by binding dust and other particulate matter, and bring them down to the ground level. This could be of use in an arid place like Delhi. The plan has been made by looking at the three major sources of pollution—transport, industry, and road dust and fugitive emissions.

Sources: the hindu.

## CPCB may consider using LiDAR devices to monitor air pollution

The Central Pollution Control Board is planning to use advanced LiDAR (Light Detection and Ranging) devices to vertically monitor the air quality of Delhi-NCR. The agency is currently focusing on strengthening its surface-level monitoring network, however, in 'later stages', vertical monitoring will also be taken up.

**What is LIDAR?**

LIDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

**Types:** Two types of LIDAR are **topographic** and **bathymetric**. Topographic LIDAR typically uses a near-infrared laser to map the land, while bathymetric lidar uses water-penetrating green light to also measure seafloor and riverbed elevations.

**Applications:** LIDAR systems allow scientists and mapping professionals to examine both natural and manmade environments with accuracy, precision, and flexibility. Scientists are using LIDAR also to produce more accurate shoreline maps, make digital elevation models for use in geographic information systems, to assist in emergency response operations, and in many other applications.

Sources: the hindu.

## Blue Flag for Beach Clean-up

The **environment ministry** has launched a pilot project named 'Blue Flag' for beach clean-up and development.

**About the Blue Flag project:**

The prime objective of the project is to enhance standards of cleanliness, upkeep and basic amenities at beaches. Under the project, each state or union territory has been asked to nominate a beach which will be funded through the ongoing Integrated Coastal Management Programme.

Sources: toi.

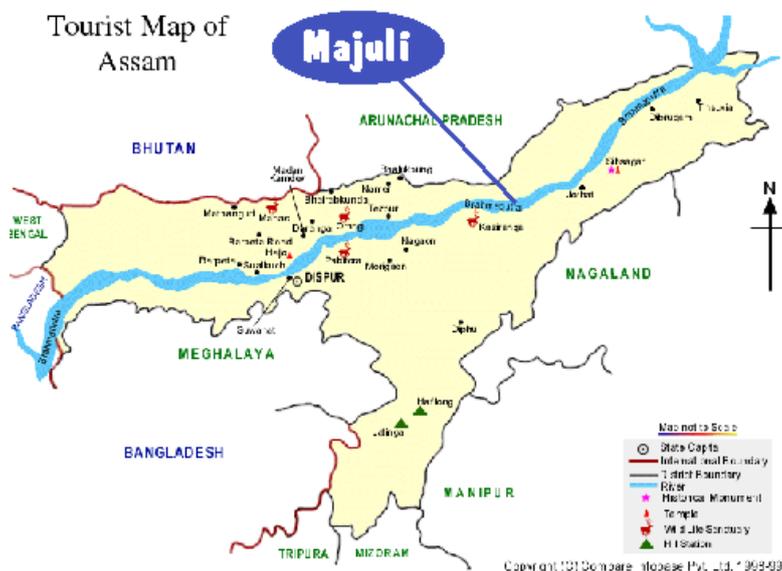
## Protection of Majuli Island

**Context:** A new scheme for protection of Majuli Island in Assam has been launched. The scheme protects the island from flood and erosion. The scheme was sanctioned by Government of India in March, 2017. The funding for the project would be from Ministry of DoNER.

- The scheme has been framed by Brahmaputra Board based on the recommendations of the high level Expert Committee of the Government of India that visits the island at least twice a year to monitor and recommend anti-erosion measures.
- The major components of the scheme include (a) Bank revetment with geo bags filled with earth / sand for a reach length of 27 km in 14 locations (b) RCC porcupine works in 41 locations (c) Construction of a sluice and (d) Construction of a Pilot channel for a length of 3.50 km.

**Need for protection:**

The area of Majuli island was 734 sq km in 1914 whereas, the minimum area was recorded to be 502 sq km in 2004. Geomorphologically, the entire Majuli island is a part of the alluvial flood plains of the Brahmaputra river. The Island is formed of soil consisting mainly of silt deposits. The soil is without cohesion and thus, susceptible to erosion. The problem of erosion has been severe after the disastrous earthquake of 1950. As per Survey of India topo-sheets and satellite imagery data, area lost by the Island is 206.7 sqkm from the year 1949 upto the year 2004. Although some measures were taken in the form of embankment and anti-erosion work by Government of Assam, the problem of erosion and flood remained mostly uncontained. The embankments built during the 60s were in poor condition.

**About Majuli Island:**

Majuli is the first island district of the country. The island is formed by the Brahmaputra river in the south and the Kherkutia Xuti, an anabranch of the Brahmaputra, joined by the Subansiri River in the north. Majuli is the nerve centre of neo-Vaishnavite.

Majuli Island was also declared the largest river island in the world, toppling Marajo in Brazil, by Guinness World Records in 2016.

Sources: the hindu.

## Regional Project to Tackle Stubble Burning

In another significant step to combat climate change, the Ministry of Environment, Forest and Climate Change has approved a regional project on 'Climate Resilience Building among Farmers through Crop Residue Management' under the National Adaptation Fund for Climate Change (NAFCC).

**Key facts:**

- The first phase of the project has been approved at a cost of approximately Rs. 100 Crore for the States of Punjab, Haryana, Uttar Pradesh and Rajasthan. The project will leverage approximately three times the approved amount with contribution from the States as well as farmers.
- The project not only aims to mitigate climate change impacts and enhance adaptive capacity, but will also counter the adverse environmental impacts that arise from burning.
- The project will be implemented following a phased approach. Initially, awareness generation and capacity building activities will be undertaken to encourage farmers to adopt alternate practices which would also help diversify livelihood options and enhance farmer's income.
- A slew of technological interventions will be undertaken for timely management of crop residue in addition to effective utilisation of existing machineries. Implementable and sustainable entrepreneurship models will be created in rural areas through upscaling successful initiatives and innovative ideas.

**Background:**

The problem of crop residue burning has been intensifying over the years, with Punjab, Haryana and Uttar Pradesh being the major burning hotspots. Increased mechanization, declining number of livestock, long period required for composting and no economically viable alternate use of residues are some of the reasons for residues being burnt in

field. This not only has implications for global warming, but also has an adverse impact on air quality, soil health and human health.

#### **About the National Adaptation Fund for Climate Change (NAFCC):**

The National Adaptation Fund for Climate Change (NAFCC) was established in August, 2015 to meet the cost of adaptation to climate change for the State and Union Territories of India that are particularly vulnerable to the adverse effects of climate change.

- The projects under NAFCC prioritizes the needs that builds climate resilience in the areas identified under the SAPCC (State Action Plan on Climate Change) and the relevant Missions under NAPCC (National Action Plan on Climate Change).
- Considering the existing arrangement with NABARD as National Implementing Entity (NIE) for Adaptation Fund (AF) under Kyoto Protocol and its presence across the country, NABARD has been designated as National Implementing Entity (NIE) for implementation of adaptation projects under NAFCC by Govt. of India.
- Under this arrangement, NABARD would perform roles in facilitating identification of project ideas/concepts from State Action Plan for Climate Change (SAPCC), project formulation, appraisal, sanction, disbursement of fund, monitoring & evaluation and capacity building of stakeholders including State Governments.

Sources: pib.

## Centre releases draft action plan to tackle air pollution in Delhi

A high-level task force headed by the principal secretary to the Prime Minister has released a 12-point draft plan to tackle pollution in Delhi NCR. The task force includes senior officials from the environment, agriculture, earth sciences, transport, power and petroleum ministries and principal secretaries of Delhi and NCR states.

#### **Proposed measures:**

- Put in place a plan to manage crop stubble and ensure that data on its burning is generated independently and in real time by monitoring the fires.
- Punitive measures for polluting industries have to be stricter and clearly defined to fix accountability which seems to be very relaxed in the current plan and, finally, the PMO has to intervene at the national level to act on the rising air pollution and health crises.
- Conduct source-attribution studies for NCR every year. The lack of data has been a problem in implementation of pollution-control measures. The last comprehensive study on air pollution in Delhi NCR was done by IIT-Kanpur in 2015.
- Nitrogen oxide emissions from thermal power plants should be brought under control. In December 2015, the environment ministry notified stricter standards for thermal power plants. None of the plants met the deadline to comply with the norms this year. These include limits for particulate matter, sulphur oxide and nitrogen oxide.
- Decongestion measures must be implemented in choke points in Delhi, Meerut, Rohtak and Gurugram. Recommendations to improve public

**Prime Focus**  
A high-level task force, headed by principal secretary to Prime Minister Nripendra Misra, has finalised "Air Action Plan" to improve air quality of Delhi and NCR. The main action points of the plan:

- Crop stubble burning**
  - Chief secretaries of Punjab, Haryana and UP to frame a plan to curb stubble burning and monitor it to reduce stubble burning
  - Department of science and technology to provide real-time data on stubble burning
- Pollution monitoring**
  - A pollution app to be developed and an anti-pollution helpline to be set up to register complaints of specific violations
- Pollution from power plants and other industries**
  - Environment ministry to develop a dashboard of all red category polluting units and ensure all these units install a certified pollution meter on their premises
  - Enforce all brick kilns to switch to zig-zag technology
- Solid waste management**
  - Special focus on 100% solid waste collection in slums and Jhuggi clusters
- Management of landfills**
  - Municipal bodies to ensure there are no fires at landfill sites
  - Municipal bodies to get special expertise to douse landfill fires
- Mechanised sweeping of roads**
  - Delhi to increase mechanised road sweeping from 15% to 40%
- Improvement of public transport**
  - Procurement of additional buses to improve last mile connectivity
  - Journey planner app to be developed to integrate Metro and bus services
  - Integrated ticketing system of DTC, private buses and Metro within six months
  - Non-destined trucks should not enter Delhi

transport include adding buses, improving last-mile connectivity, launching a journey planner app integrating Metro, DIMTS and DTC services.

- An anti-pollution helpline has also been proposed along with an app whereby people can submit photos of violations to get prompt remedial action.
- The action plan called for strict action against polluting brick kilns, especially in areas such as Bagpat (Uttar Pradesh) and Jhajjar (Haryana), operating without environmental clearance. These kilns are required to migrate to zig-zag technology that reduces particulate matter pollution.
- The task force also called for promotion of electric vehicles to tackle transport-related pollution. State and municipal bodies have been asked to manage solid waste better and ensure no fire outbreaks at landfills. Agencies involved in large construction projects have been directed to set up facilities to take care of construction and demolition waste and recycle as far as possible.

#### Background:

The task force was formed after a severe spell of pollution in the region in November when air quality remained at hazardous levels for almost two weeks. The centre and the Union environment ministry faced flak for failing to coordinate actions across states that impacted Delhi NCR's air quality.

The environment secretary is tasked with ensuring implementation of the measures, while the task force will step in occasionally to monitor progress. The direct intervention by the PMO would give the action plan more heft.

Sources: the hindu.

*Paper 3 Topic: Security challenges and their management in border areas; linkages of organized crime with terrorism.*

## Border Protection Grid (BPG)

#### Context:

The Union Home Minister recently highlighted the importance of having Border Protection Grid (BPG) in the country. The concept was highlighted during the recently held meeting of the Chief Ministers of the Indo-Bangladesh Border (IBB) States, in Kolkata.

#### About BPG:

##### What is it?

- Border Protection Grid (BPG) is a multi-pronged and foolproof mechanism to secure border. The grid will comprise of various elements namely physical barriers, non-physical barriers, surveillance system, Intelligence agencies, State Police, BSF and other State and Central agencies.



Supervision: BPG will be supervised by a State level Standing Committee under the Chairmanship of respective Chief Secretaries.

#### Need for BPG:

- Border security is important to facilitate legitimate trade and commerce between the countries. India has friendly relations with Bangladesh and there is a need to facilitate genuine trade and legitimate cross-border movement of people while curbing radicalization, illegal migration, and smuggling of cattle, fake Indian currency notes and drugs etc. BPG will ensure greater help for the States in the overall border security.
- Secure borders are also necessary to prevent entry of illegal migrants some of whom have links with extremist groups for furthering anti-national activities with ulterior motives and posing threat to internal security.

#### Background:

The Indo-Bangladesh Border covering 5 states of India including Assam, Meghalaya, Mizoram, Tripura and West Bengal is 4096 km long. So far in 3006 km border security infrastructure of fence, roads, floodlights and border out posts (BOPs) are in place and works in the remaining 1090 km are yet to be started. Out of this, 684 km will be secured with fence and the related infrastructure, and the balance 406 km with the non-physical barriers. Although bulk of the

infrastructure is in place or under construction, construction in some parts is yet to commence mainly due to land acquisition issues.

Sources: pib.

## Scorpene-class submarine Kalvari

**Context:** India's first modern conventional submarine, INS Kalvari, has been commissioned into Navy's fleet.

**In-depth look**  
The Navy set to induct *INS Kalvari*, its first modern conventional submarine into the fleet in Mumbai on Thursday



<p><b>What is a Scorpene?</b> A conventional powered submarine weighing 1,500 tonnes that can go up to depths of 300m. Built by the Naval Group, formerly DCNS, of France</p>	<p><b>The India connection</b> In October 2005, India signed a \$3.75 billion deal for six such submarines to be built by the Mazgaon Dock Limited in Mumbai with transfer of technology. Additional deals were signed with Thales and MBDA for systems and weapons</p>	<p><b>What is the status of the deal?</b> After repeated delays over four years, the first submarine began sea trials in May 2016 and is set to be commissioned on Thursday. The second Scorpene Khanderi is undergoing sea trials and is expected to be commissioned by the year-end. All six submarines are expected to be inducted by the end of 2020</p>	<p>The Navy now possesses 13 conventional submarines and one nuclear attack submarine <i>INS Chakra</i> on lease from Russia</p>
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### INS Kalvari- key facts:

- The diesel-electric submarine is designed by French naval defence and energy company DCNS. The submarine is named after the dreaded tiger shark, a deadly deep sea predator of the Indian Ocean.
- The submarine boasts of superior stealth features such as advanced acoustic silencing techniques, low radiated noise levels, hydro-dynamically optimised shape and the ability to launch a crippling attack on the enemy using precision-guided weapons.
- The submarine, which has a speed of 20 knots, is equipped with sea-skimming SM-39 Exocet missiles and heavy-weight wire-guided surface and underwater target torpedoes.

Sources: the hindu.

## UPCOCA bill

The Uttar Pradesh government has approved the draft of a bill to enact the Uttar Pradesh Control of Organised Crime Act (UPCOCA) on the lines of the Maharashtra Control of Organised Crime Act (MCOCA) to combat land mafia, mining mafia and organised crime in the state. The Bill seeks to check to check organised and white-collar crime.

### Highlights of the Bill:

- Organised crime has been defined in detail in the (draft) bill. Kidnapping for ransom, illegal mining, manufacturing illicit liquor and its sale, acquiring contracts on the basis of muscle power, organised exploitation of forest produce, trade in wildlife, fake medicines, grabbing of government and private properties, and 'rangdari' (extortion) will come under the ambit of the new law.
- Arrangements have also been made to check the misuse of the bill and that cases under it will be filed only on the recommendations of the committee of divisional commissioner and range deputy inspector general of police.
- The permission of the zonal inspector general of police will be required before filing of charge sheet after thorough inquiry. It has also been proposed that properties amassed through organised crime would be taken over by the government with the permission of the court during the course of investigation to check criminal elements from taking advantage of it. The property will be confiscated by the state government after conviction.

- Special courts will be constituted for hearing of cases lodged under the provisions of this bill and a “state-level organised crime control authority” has been proposed to monitor gangs involved in organised crime. The state level authority will be headed by the principal secretary for Home. This authority will either take cognisance on its own or on a complaint. It will probe the activities of organised gangs and will be entitled to examine any government file related to the case.
- There is also a provision to form district level organised crime control authorities, which will be led by district magistrates. They can recommend cases to the state level authority after thorough probe.
- The draft bill also proposes a tribunal led by a retired high court judge for appealing against it, and will have a principal secretary and an official of DGP rank as its members. Anyone can appeal against the decision of the authority in this tribunal. Those found involved in organised crime and having security will no longer be extended government protection and all white-collar criminals will be treated as such.

Sources: the hindu.

*Paper 3 Topic: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.*

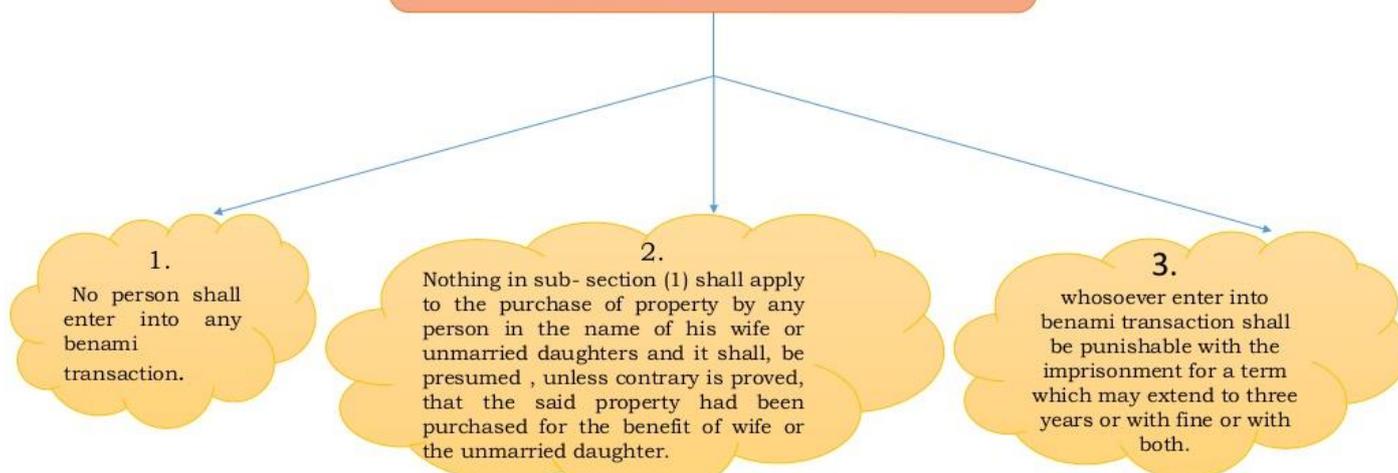
## Benami Act

### Context:

The Income-Tax Department is scrutinizing all unexplained credits and investments in personal as well as corporate income-tax filings and is looking to invoke the Benami Act in many cases. Unexplained credits, in the books of a company or bank accounts of individuals, have so far been treated as black money, attracting a higher tax of up to 80%.

## Benami Transaction (prohibition) Amendment Act' 2016

**Section 3** of the Benami Transaction Act lays down **Prohibition of Benami Transactions**



### About the Benami Act:

The Benami Transactions (Prohibition) Amendment Act, 2016, designed to curb black money and passed by parliament in August, came into effect on November 1, 2016. The new law amends the 1988 Benami Transactions Act.

### Highlights of the Act:

- The law provides for up to seven years' imprisonment and fine for those indulging in such transactions.
- The law prohibits recovery of the property held benami from benamdar by the real owner. As per the Act, properties held benami are liable for confiscation by the government, without payment of compensation.

- An appellate mechanism has been provided under the act, in the form of an adjudicating authority and appellate tribunal. According to the government, the four authorities who will conduct inquiries or investigations are the Initiating Officer, Approving Authority, Administrator and Adjudicating Authority.

### **What is benami transaction?**

A benami transaction is one where a property is held by one person and the amount for it is paid by another person. Therefore, in a benami transaction, the name of the person who paid the money is not mentioned. Directly or indirectly, the benami transaction is done to benefit the one who pays.

Sources: ET.

## NIC CERT

### **Context:**

The Centre has unveiled the NIC-CERT centre that would monitor and help in early detection and mitigation of cyberattacks on government networks.

### **About NIC-CERT:**

#### What is it?

It is a dedicated body to detect, prevent and mitigate the impact of cyber attacks on the National Informatics Centre (NIC).

#### Role:

NIC-CERT will work to ensure early detection and immediate mitigation of cyber attacks by monitoring data across the NIC platform, including communication between all the levels of government and between governments to citizens. NIC-CERT will operate in close coordination and collaboration with sectoral CERTs and more so with CERT-IN.

### **About NIC:**

NIC, which comes under the IT ministry, has a key role in e-governance at the national, state and district levels. Almost all Indian-government websites are developed and managed by NIC.

### **About CERT- In:**

CERT-In is the national nodal agency under the IT ministry, which deals with cyber security threats such as hacking and phishing. It is tasked with the collection, analysis and dissemination of information on cyber incidents and even taking emergency measures for handling cyber security incidents.

Sources: pib.

## Crackdown against Bitcoins

**Context:** The rising craze for bitcoin, a cryptocurrency that has rocketed to shocking highs, has come under the government's lens. The government has begun a crackdown on illegal uses of this unregulated virtual currency.

Widening its probe into bitcoin investments and trade, the Income Tax (IT) department is set to issue notices to 4 to 5 lakh high networth individuals (HNI) across the country who were trading on the exchanges of this unregulated virtual currency.



### **Concerns associated with the use of bitcoins:**

- Bitcoin can be an easy way to evade tax or snare unsuspecting small investors in ponzi schemes. The regulators are worried about their use for illicit and illegal activities, subjecting the users to an unintentional breach of laws against money laundering and terror finance.
- Concerns also emanate from some unscrupulous entities indulging in illicit money-pooling activities—commonly known as ponzi schemes—with the promise of huge returns from investment in bitcoins and other variants, which they claim are minted through blockchain, a distributed ledger technology that was created to mint bitcoins and comprises of extremely complex algorithms with several thousand nodes for each chain.

- There is a suspicion that some so-called cryptocurrencies and bitcoin investments may actually have nothing to do with any blockchain-developed virtual currency and are just new ways devised by scamsters to ride the wave and what they may be offering could be 'e-ponzi' schemes.

#### Background:

While some of the countries such as Nepal, Bangladesh, Kyrgyzstan have declared Bitcoins as a means of payment illegal and in violation of the state law, a majority are yet to take a stand on it. In December 2013, RBI issued a warning with caution to users, holders and traders of virtual currencies, including Bitcoins, about the potential financial, operational, and legal, customer protection and security related risks that they are exposing themselves to. Bitcoins are currently unregulated in India. There are no specific legal frameworks for Bitcoins and cryptocurrencies in India yet.

Sources: the hindu.

## Facts for Prelims

### Rooppur Nuclear Power Plant

- **Context:** Bangladesh Prime Minister Sheikh Hasina recently inaugurated construction work on the much-awaited Rooppur Nuclear Power Plant in Ishwardi, located in the western part of the country. The plant is expected to add 2,400 MW of electricity to the national grid by 2024, helping the country meet its increasing demand for electricity.
- **Implementation of the project:** The mega project is being implemented by state-run Bangladesh Atomic Energy Commission with financial and technological support from Russia through its state nuclear agency, Rosatom.

### Ajeya Warrior-2017

- **What is it?** It is a fourteen days training exercise between the Indian Army and the British Army. It is being held in Rajasthan. It is the third joint military exercise between the two countries. The first exercise was conducted in 2013 at Belgaum, Karnataka, whereas for the second exercise in 2015, an Indian Army contingent had visited the United Kingdom.
- The **aim** of the exercise is to build and promote bilateral relations and enhance interoperability while sharing experiences between the Royal British Army and the Indian Army.

### World's first IT campus for differently-abled in Hyderabad

- On the eve of World Disability Day, the Telangana State government has entered into an agreement with Vindhya E-Infomedia Private Limited to set up the IT campus which will focus on creating employment exclusively for PWDs. With this Hyderabad is all set to be a home for world's first Information Technology campus for persons with disabilities (PWDs).
- The proposed campus spread over 10 acres, will come up in the IT Park developed by the State government near Hyderabad International Airport and will have all amenities like training, residential facility and delivery centers. The campus which will cater to various clients both domestic and international, is aimed to provide training and employment for 2,000 people in the next five years.

### Kapu reservation bill

- The Andhra Pradesh assembly has unanimously passed the Kapu reservation bill which will provide the community with a 5% quota in education and employment in the state.
- The state government will now send this bill to the centre. As 5% of reservation to Kapus makes total reservation exceed 50%, central govt nod is compulsory. Kapus are primarily an agrarian community, forming a heterogeneous peasant caste.

## Vigilant Ace

- **What is it?** It is the annual U.S.-South Korean aerial drill. It is their largest ever joint exercise. It is designed to enhance their readiness and operational capability and to ensure peace and security on Korean peninsula.

## International Tourism Mart

- 6th International Tourism Mart (ITM) is being held in Guwahati, Assam. The Ministry of Tourism, Government of India, in association with the North Eastern States has organized this Mart.
- The objective of the event is to highlight the tourism potential of the region in the domestic and international markets. The International Tourism Marts are organised in the North Eastern States on rotation basis. The earlier editions of this mart have been held in Guwahati, Tawang, Shillong, Gangtok and Imphal.

## Arogya 2017

- **What is it?** It is the First Ever International Conference on AYUSH and Wellness. The conference is being held in Delhi. 'Arogya 2017' is a comprehensive exhibition cum conference on Ayurveda, Yoga, Naturopathy, Unani, Siddhha, Sowa Rigpa, Homoeopathy and wellness.
- 'Arogya 2017' has been jointly organized by **Ministry of AYUSH** and **Ministry of Commerce and Industry** of Government of India including Pharmexcil in partnership with FICCI to showcase the strength and scientific valuation of traditional system of medicine. More than 250 manufacturers of alternative medicine are showcasing their products and services at International Arogya 2017.

## UN Environment's Patron for Clean Air

- Paytm founder and CEO Vijay Shekhar Sharma has been named the UN Environment's 'Patron for Clean Air'. He will help drive greater environmental action and awareness, and advocate for the goals of UN Environment's global BreatheLife campaign.
- UN Environment's global BreatheLife campaign will work on promoting policy and citizen action for better air quality for people.

## Rape of minors to attract death in MP

- The Madhya Pradesh Assembly has unanimously passed a Bill awarding death to those found guilty of raping girls aged 12 and below. With this, Madhya Pradesh becomes the first State where those convicted of such rapes will face the gallows. The Bill will now be sent to the President for his assent, after which it will become a law.

## New Zealand kiwi birds

- The **International Union for the Conservation of Nature (IUCN)** has upgraded the status of **Okarito kiwi** and **Northern Brown kiwi** from endangered to **vulnerable**. The number of Okarito kiwi has risen from 160 in 1995 to 400-450 now, and Northern Brown kiwi numbers are also climbing.

## OP Sahayam

- **What is it?** It is an Indian Navy exercise for undertaking Search and Rescue (SAR) and providing Humanitarian Assistance and Disaster relief (HADR) material support, over Southeast Arabian Sea and L& M islands in the aftermath of Very Severe Cyclonic Storm 'OCKHI'.

## SAICON 2017

### What is it?

- It is the First International Conference on Sports Medicine and Sports Sciences. It is being held in New Delhi. Organized by Sports Authority of India, the 3-day conference is being attended by about 1000 national and international delegates.
- It aims to promote scientific temperament in the country and inspire students, researchers and educationists alike to take up sports science and research to the next level.

## Time person of the year 2017

- Time has chosen its 2017 Person of the Year: the Silence Breakers, the women and men who have come forward to shed light on sexual harassment and abuse in America. "The Silence Breakers" is the vanguard of a global movement by millions of women to share their stories of sexual harassment and abuse.

## Burial urn, pots unearthed in Pallavaram

- A six-foot-high burial urn, mudhumakkal thazhi, made of clay, and pieces of pots have been unearthed at Old Pallavaram in Chennai. The artefacts are estimated to be around 2,000 years old.

## World's oldest eye

- Researchers have unearthed what they believe to be the "oldest eye" in a 530-million-year-old fossil of an extinct sea creature. The fossil of *Schmidtiellus reetae*, which includes an early form of the eye seen in many of modern animals, including crabs, bees and dragonflies, was discovered in Estonia.
- *Schmidtiellus reetae* had a primitive form of compound eye — an optical organ that consists of arrays of tiny visual cells, called ommatidia, similar to those of present-day bees. Although the species had poor vision compared with many modern animals, it could identify predators and obstacles in its path. Its eye consisted of approximately 100 ommatidia, and did not have a lens, like the modern compound eyes, probably because the primitive species lacked parts of the shell needed for lens formation.

## India's first energy-efficient railway station

- **Kacheguda** has earned the distinction of being the first energy-efficient 'A1 Category' railway station in the country. Kacheguda railway station has achieved **100% energy efficiency** by replacing 1,312 conventional lights with light-emitting diode (LED) lighting, 370 ceiling fans with Brushless DC Electrical (BLDC) motors energy-efficient fans and 12 air conditioners with energy efficient inverter type ACs.
- Kacheguda Railway station is a historic building and had completed 100 years. Situated in the heart of Hyderabad, it was built in 1916 by the Nizam's Guaranteed State Railway during the reign of Mir Osman Ali Khan, the seventh Nizam.

## Universal Health Coverage Day

Universal Health Coverage Day was commemorated on 12<sup>th</sup> December, 2017.

### Why this day?

It is the anniversary of the first unanimous United Nations resolution calling for countries to provide affordable, quality health care to every person, everywhere.

### Background:

Universal Health Coverage (UHC) means everyone can access the quality health services they need without financial hardship. Universal health coverage has been included in the new Sustainable Development Goals adopted by the United Nations.

## India's First Ever Mobile Food-Testing Lab

Goa state government has launched the country's first ever mobile food testing laboratory. It is entirely funded by the Centre, which will also bear the maintenance cost for five years.

### **What is it for?**

The laboratory, mounted on a bus will travel across the state and check food samples on the spot. This would be the first ever 'Food Safety on Wheel' vehicle in the country. The laboratory will help in the on-the-spot testing of food items and curb adulteration. Besides this, it will also educate people about nutrition and importance of safe food.

## Amarnath cave declared a 'silent zone'

- In a bid to preserve the eco-sensitive Amarnath cave shrine in south Kashmir Himalayas, the National Green Tribunal has declared it a "silence zone" and prohibited religious offerings beyond the entry point. Declaring the area around the Amarnath cave shrine a "silence zone" would be helpful in preventing avalanches and maintaining its pristine nature.
- Significance of this move: The Amarnath cave shrine is considered to be one of the holiest in Hinduism. The cave itself is covered with snow most of the year except for a short period of time in summer when it is open for pilgrims. The Amarnath cave is located in a delicate ecosystem. The directions would make the Amarnath Yatra safe and convenient for the devotees. This would protect the shrine from degradation and ensure it is protected for the coming generations.

## Rajasthan becomes first in country to offer e-mail IDs in Hindi

Rajasthan has become the first state in the country to offer free e-mail address in Hindi to its residents. The facility — name@rajasthan.bharat (in Devanagari script) — will lead to millions of new users who are not comfortable with English e-mail ids. The initiative will ensure maximum participation of people towards e-governance and also that maximum facilities are available in vernacular language.

## "PRATAP" helicopters

**Context:** The Soviet-era MI-8, also known as 'Pratap', the backbone of the Indian Air Force helicopter operations, was recently phased out, bringing an end to its glorious service career spanning 45 years.

**Background:** Formally inducted in 1972 and rechristened as "Pratap", MI-8 took part in several major IAF operations, including Operation Meghdoot in the Siachen Glacier and the Indian Peace Keeping Force operation in Sri Lanka. The helicopter, inducted in 10 operational helicopter units, was also extensively used in Humanitarian and Disaster Relief operations, besides being associated with VIP/VVIP flying.

## Nyaya Gram project

**Context:** President of India, Ram Nath Kovind, recently laid the foundation stone of the Nyaya Gram project of the High Court of Allahabad.

**What is it?** It is a model township of High Court in Allahabad. The township includes a judicial academy, an auditorium and residences for judges and staff.

## Global conference on functional materials

International conference on advanced functional materials is being held in Telangana. The conference aims to address the application aspect of the functional materials in areas of societal relevance, to discuss current scientific issues and to ignite scientific temper in young researchers.

**Theme:** 'Applications of smart materials in the areas of nano-science and nano-technology, synthetic chemistry, sensors and computational materials science'.

**Host:** Rajiv Gandhi University of Knowledge Technologies (RGUKT) at Basar in Telangana is hosting the conference.

## Goa sets up task force to fight drug menace

Goa government has formed an Anti-Narcotics Task Force, comprising members of various law enforcement agencies, to draw a comprehensive action plan to combat trafficking of drugs.

**Background:** Goa being a global tourist destination, lakhs of tourists, international as well as domestic, visit the state every year and are the major target of drug peddlers/dealers.

## HAMESHA VIJAYEE

**What is it?** It is an exercise by armed forces being conducted in the deserts of Rajasthan to evaluate the capability of the armed forces to strike deep into enemy territory in an integrated air-land battle.

**Significance of the exercise:** Unique in scope and scale, the exercise being conducted in battle like conditions, aims at fine tuning surveillance and destruction mechanisms to support precision strikes and manoeuvres by network enabled forces. With emphasis on joint operations, the exercise would test robust sensor to shooter grids by employing a vast array of surveillance and air assets networked with land based strategic and tactical vectors.

## Naseem-Al-Bahr

**What is it?** It is a bilateral exercise between Indian Navy and Oman Navy. The exercise is also called as "Sea Breeze". The 11th edition of this exercise was held in Muscat. The first exercise Indian Navy with Royal Navy of Oman was conducted in 1993 and this year marks 24 years of Indian Navy -Royal Navy of Oman bilateral exercises.

## ICGS - Sujay

**Context:** Indian Coast Guard Ship – Sujay – the sixth in the series of six 105m Offshore Patrol Vessel (OPV) was recently commissioned.

**About ICGS Sujay:** Sujay means 'great victory'. The 105 meter OPV has been designed and built by Goa Shipyard Limited. It is fitted with state-of-the-art navigation and communication equipment and sensors and machinery. The ship is based at Paradip, Odisha under the operational and administrative control of the Commander Coast Guard Region (North-East).

## Odorrana arunachalensis

**What is it?** It is a recently discovered frog species from Arunachal Pradesh's Lower Subansiri district, one of the five discovered in India in the recent times and the 59th in the world.

**Features:** The species is sighted during the wet season, from April to September. They are not seen in the dry seasons. It is a genus of true frogs (Ranidae) from East Asia and surrounding regions including India. This new species inhabits moss and fern covered rocky stratum along hill streams in mixed wet tropical forest type.

**Location:** The new species was discovered from Talley Valley Wildlife Sanctuary (WLS). Talley is a plateau with dense forest of silver fir trees, pine clad plateau of beautiful grandeur, and a vast wasteland. The area has some of the most important endangered species including the clouded leopard.

## Country's first AC suburban local train in Mumbai

The Indian Railways has flagged off the country's first air-conditioned suburban local train for Mumbai commuters, 150 years after the first suburban local was hauled by a steam engine in 1867. Manufactured by the Integral Coach Factory, Chennai, the fully air-conditioned air-suspension coaches have a capacity of carrying nearly 6,000 commuters per rake, automatic door opening-closing system, LED lights, Emergency Talk Back System between commuters and guard besides a public address system and advanced GPS-based passenger information systems.

## Delhi Metro's Magenta Line

Delhi metro is all set to inaugurate its first section of Magenta line. This line will connect between Botanical Garden and Kalkaji, reducing the travel time between Noida and South Delhi by about half an hour.

**Features:** The Majenta Line will have, for the first time in India, trains that will run unattended. However, there would be roving attendants. Similarly, the platform screen doors (PSDs) are also being used for the first time. PSDs are glass-made screens installed near the edge of platforms that open only when a train arrives and shut after it departs. They are installed to enhance commuter safety. There is also Communication Based Train Control (CBTC) signalling technology will be used that can facilitate movement of trains with a frequency of 90 to 100 seconds.

## World's largest amphibious aircraft takes off in China

China has launched homegrown AG600, the world's largest amphibious aircraft. The plane is codenamed Kunlong. With a wingspan of 38.8 metres (127ft) and powered by four turboprop engines, the aircraft is capable of carrying 50 people and can stay airborne for 12 hours. The amphibious aircraft has military applications but will be used for firefighting and marine rescue.

## India's first design university 'World University of Design' opens campus

India's first and only Design University – World University of Design has opened its campus at Sonapat, Haryana. The University has International Collaborations with foreign Universities like UWS University of West Scotland, VFS the Vancouver Film School, and IAAD the Italian University of Design.

The university offers country's largest creative course catalogue – 23 specialized UG and PG programs in various Design arenas such as Design, Fashion, Communication, Visual Arts, Design and Retail Management, and Architecture. The University follows a unique curriculum that encourages Research, Academic Excellence, Industry Preparedness and Social Innovation.

## Odisha recognised as 'Champion State' for exports

The Centre has recognised Odisha as a 'Champion State' for recording the highest growth in exports during 2016-17. The exports from the state have increased from Rs 19,082 crore in 2015-16 to Rs 40,872 crore in 2016-17 with merchandise exports from Odisha registering the highest growth rate of 114% among all the states.

## Bharatiya Nirdeshak Dravya (BND-4201)

**What is it?** It is India's first home-grown high purity gold reference standard. It was launched recently. It is the reference material for gold of '9999' fineness (gold that is 99.99% pure). It will be beneficial to the consumers and public at large to ensure purity of gold.

**Benefits of the new standard:** Once the BND's of other purity gold are made available in the market, jewellers will move towards more instrumental methods rather than the conventional fire assay methods for testing, which are not only time consuming but also not environment friendly as poisonous gases are released. Gold reference standard is indispensable in gold and jewellery hall marking. This will also be useful for Collection and Purity Testing Centres to certify the purity of gold deposits under the gold monetisation scheme.

## 'Mission Seven Summits'

**What is it?** After scaling of Mt Everest in 2005, IAF launched a unique and unprecedented series of mountaineering expedition 'Mission Seven Summits' with an aim to fly the tricolour and the IAF flag on the highest peaks in every continent. With this, the IAF has become the first organisation in India to achieve this unique feat.

The highest peak on each continent – Asia **Mt. Everest**, Australia **Mt. Kosciuszko**, South America **Mt. Aconcagua**, Antarctica **Mt. Vinson Massif**, North America **Mt. Denali**, Europe **Mt. Elbrus** and Africa **Mt. Kilimanjaro** – are part of **Mission7Summit**.

## Yaogan 30 project

**Context:** China has launched its Long March 2C rocket with a trio of Yaogan-30 satellites into space. Developed by the Chinese Academy of Sciences (CAS), the Yaogan-30 03 trio consists of three identical satellites equipped with two deployable solar arrays.

Yaogan is a series of Earth-observing satellites launched by China since 2006. The satellites are intended for scientific experiments, land survey, crop yield assessment and disaster monitoring.

## Kabul-Mumbai cargo service on

India and Afghanistan have launched an air freight corridor service connecting Kabul with Mumbai. The air corridor marks an important bilateral development as it comes as Afghanistan joined Pakistan and China in a trilateral talk in Beijing which marked Kabul's opening up to Islamabad.

## PIIGS

According to a research report by ratings agency CARE, the 9.85% ratio of bad loans in banks has put India in the group of those nations that have very high nonperforming assets (NPAs). The only major countries with similar ratios are the troubled EU nations: Portugal, Italy, Ireland, Greece and Spain — commonly referred to as PIIGS.

## Bali declares 'garbage emergency' amid sea of waste

The Indonesian island of Bali recently declared a "garbage emergency" in response to the overwhelming amount of plastic waste that has floated ashore and spoiled pristine beaches. A 3.6-mile stretch of beach on the island's western coast was declared an emergency zone after authorities realised that the volume of plastic being washed up was endangering the tourist trade.

**Background:** Indonesia is the world's second largest contributor to marine debris, outdone only by China, the most populous country in the world. In addition to degrading the beaches, plastic waste blocks waterways, impacting transportation and increasing flooding risk, while posing a risk to marine animals.

## Forest Carbon Partnership Facility

Developing and industrialized countries have requested the **World Bank** to explore a framework for piloting activities that would reduce emissions from deforestation and degradation using a system of policy approaches and performance-based payments. The proposed framework is called the **Forest Carbon Partnership Facility**.



The Forest Carbon Partnership Facility is a global partnership of governments, businesses, civil society, and Indigenous Peoples focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests, and the enhancement of forest carbon stocks in developing countries (activities commonly referred to as REDD+).

### The four strategic objectives of the FCPF:

- To assist countries in their **REDD+** efforts by providing them with financial and technical assistance in building their capacity to benefit from possible future systems of positive incentives for REDD+.
- To pilot a performance-based payment system for REDD+ activities, with a view to ensuring equitable benefit sharing and promoting future large-scale positive incentives for REDD+.
- Within the approach to REDD+, to test ways to sustain or enhance livelihoods of local communities and to conserve biodiversity.
- To disseminate broadly the knowledge gained in the development of the Facility and the implementation of Readiness Preparation Proposals (RPPs) and Emission Reductions Programs (ERPs).

Source: <https://www.forestcarbonpartnership.org/>

## BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL)

The **BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL)** is a multilateral fund, supported by donor governments and managed by the **World Bank**. It promotes reducing greenhouse gas



emissions from the land sector, from deforestation and forest degradation in developing countries (**REDD+**), and from sustainable agriculture, as well as smarter land-use planning, policies and practices.

ISFL has a geographically diverse portfolio of large-scale programs that can have significant impact and transform rural areas by protecting forests, restoring degraded lands, enhancing agricultural productivity, and by improving livelihoods and local environments.

The ISFL supports programs in Colombia, Ethiopia, and Zambia. An additional program in Indonesia is under consideration. The fund provides technical assistance to support the design of programs that impact multiple sectors of the economy and results-based payments to incentivize and sustain program activities.

Source: <http://www.biocarbonfund-isfl.org/>

## Carbon Initiative for Development (Ci-Dev)

The Carbon Initiative for Development (Ci-Dev) was launched in 2011 by **World Bank** to build capacity and develop tools and methodologies to help the world's **poorest countries** access carbon finance, mainly in the area of energy access. It is set up to use performance payments based on reduced emissions to support projects that use clean and efficient technologies in low-income countries.



### Focus areas:

- **Increasing Energy Access:** The Ci-Dev will provide financing for projects that support access to energy in low-income countries, in collaboration with other parts of the World Bank Group.
- **Building on the CDM:** The Ci-Dev will build on the infrastructure that has been created by the Clean Development Mechanism (CDM).
- **Carbon Finance:** The Ci-Dev will use results-based payments as its vehicle for financing energy access projects, building on a decade of carbon finance experience by the World Bank Group.

### The objectives of the Ci-Dev are the following:

- To demonstrate that performance-based payments for the purchase of certified carbon emission reductions (CERs) can lead to a successful and viable business model that promotes increased private sector participation, and share lessons for replication.
- To influence future carbon market mechanisms so that low income countries, and especially least developed ones, receive a greater and fairer share of carbon finance, resulting in high development benefits that avoid carbon emissions.
- To support low income countries in developing standardized baselines and establishing “suppressed demand” accounting standards in key areas such as rural electrification, household energy access and energy efficiency.
- To contribute proposals to further improve and extend the scope of the **Clean Development Mechanism (CDM)** for use by least developed countries (LDCs), in particular for Programmes of Activities (POA).

Source: <http://www.ci-dev.org/>

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