GENERAL STUDIES-1

INDIAN CULTURE

EK BHARAT-SHRESHTHA BHARAT

Why in news?

Under 'Ek Bharat-Shreshtha Bharat' Yojana, Madhya Pradesh has been made partner of Manipur and Nagaland. The Higher Education Department of Madhya Pradesh has been made nodal department to implement the scheme.

As part of this, Madhya Pradesh will participate in Sangai Mahotsav being organized in Manipur. Similarly, teams of Manipur and Nagaland will take part in Lok Rang and Bal Rang programmes to present their cultural programmes and to apprise people with their culture.

Besides, translation work of Nagaland's books has also been started in Madhya Pradesh to introduce people of the state with their activities and cultural heritage.

About Ek Bharat Shreshtha Bharat:

"Ek Bharat Shreshtha Bharat" was announced by Hon'ble Prime Minister on 31st October, 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel.

Aim

Through this innovative measure, the knowledge of the culture, traditions and practices of different States & UTs will lead to an enhanced understanding and bonding between the States, thereby strengthening the unity and integrity of India.

Implementation:

All States and UTs will be covered under the programme. There will be pairing of States/UTs at national level and these pairings will be in effect for one year, or till the next round of pairings. The State/UT level pairings would be utilized for state level activities. District level pairings would be independent of the State level pairings.

Significance:

The activity will be very useful to link various States and Districts in annual programmes that will connect people through exchanges in areas of culture, tourism, language, education trade etc. and citizens will be able to experience the cultural diversity of a much larger number of States/UTs while realising that India is one.

HISTORY

BIRSA MUNDA

Why in news?

Birth anniversary of Birsa Munda was observed on November 15th. In recognition of his impact on the national movement, the state of Jharkhand was created on his birth anniversary in 2000.

Who was he?

Bisra Munda was a folk hero and a tribal freedom fighter hailing from the Munda tribe. He was a spearhead behind the Millenarian movement that arose in the Bihar and Jharkhand belt in the 19th century under the British colonisation. He is also known as 'Dharti Abba' or the Earth Father.

Birsait:

Bisra wanted to reform the tribal society and so, he urged them to let go of beliefs in witchcraft and instead, stressed on the importance of prayer, staying away from alcohol, having faith in God and observing a code of conduct. Based on these, he started the faith of 'Birsait'.

Achievements:

Bisra started a movement called 'Ulgulan', or 'The Great Tumult'. His struggle against the exploitation and discrimination against tribals led to a big hit against the British government in the form of the Chotanagpur Tenancy Act being passed in 1908. The act restricted the passing on of land from the tribal people to non-tribals.

GENERAL STUDIES-2

POLITY

SECOND OFFICIAL LANGUAGE

Why in news?

Telangana government has declared Urdu as the state's second official language.

What the constitution says?

The Indian constitution does not specify the official languages to be used by the states for the conduct of their official functions, and leaves each state free to, through its legislature, adopt Hindi or any language used in its territory as its official language or languages. The language need not be one of those listed in the Eighth Schedule, and several states have adopted official languages which are not so listed.

OVERREACH BY GOVERNOR

The issue

Breaking convention, Tamil Nadu governor recently held a meeting with officials of various government departments. The Governor has attempted to explain his interactions, saying he was seeking to familiarize himself with the administration and that he could appreciate its work in implementing schemes only if he got to know all details first hand.

The move invited criticism from some political parties, which accused the governor of interfering in the state government's functioning. Experts say, it is an act of constitutional impropriety for the Governor of a State to review the work of government officials when an elected regime is in place.

Constitutional position

Article 167 of the Constitution says it is the Chief Minister's duty to communicate to the Governor all decisions of the Council of Ministers relating to the administration and proposals for legislation. It enjoins the Chief Minister to furnish such information relating to the administration as the Governor may call for.

There may be occasions when the Governor may need to ask a top bureaucrat or the head of the police force for a report on a major incident or development, but even that should be for the limited purpose of getting an accurate picture before sending a report to the Centre. So, according to experts, If the Governor wanted to understand how schemes are being implemented, he could have sought details from the Chief Minister instead of holding meetings in the districts.

In conclusion

Governor should not refrain from taking an independent view of any matter or legislative proposal. But his functioning should be within the bounds of established norms and conventions.

FREEDOM OF SPEECH AND EXPRESSION

Without free freedom of speech & of the press no public education is possible which is essential for the proper functioning of the process of popular government. Thus, the government has recently underlined the commitment for "upholding the freedom of the press and expression in all forms".

What is Freedom of press?
Freedom of the press or freedom of the media is the freedom of communication and expression through various mediums, such as electronic media and published materials. Wherever such freedom exists mostly implies the absence of interference from an overreaching state and its preservation may be sought through constitutional or other legal protections.

In India, freedom of the press has been treated as part of the "freedom of speech and expression" guaranteed by Article 19(1) (a) of the Constitution.

Freedom of press has three essential elements:
1. Freedom of access to all sources of information
2. Freedom of publication, and
3. Freedom of circulation.

What are the restrictions of freedom of press?

Article 19(2): The restrictions that apply to the "freedom of speech and expression" also apply to the "freedom of press and media".

Article 19(2), provides reasonable restrictions on the following grounds:
1. Sovereignty & Integrity of India
2. Security of the State
3. Friendly relations with Foreign States
4. Public Order
5. Decency or Morality
6. Contempt of Court

Press Council of India: The Press Council of India acts as a watchdog for the print media. It has quasi- judicial powers which have empowered the council to hold hearings on receipt of complaints and take suitable action where appropriate.

News Broadcasting Standards Authority (NBSA): In the case of television news, the News Broadcasting Standards Authority (NBSA) looks into violation of code of ethics laid out by the News Broadcasters Association (NBA).

No law for protection of identity of sources: The protection of identity of sources used by the journalists is an important element in how they unearth the truth. However, in India, there are no statutory rights accorded to journalists to protect their sources.

Criminal defamation: Criminal defamation, as defined under Section 499 of the Indian Penal Code, permits any person who has suffered damage in reputation on action of others to sue for defamation.

What are the provisions for the protection of freedom of press?

Article 19(1) (a):
Although, the Indian Constitution does not expressly mention the liberty

of the press, it is evident that the liberty of the press is included in the freedom of speech and expression under Article 19(1) (a).

Freedom under Article 19(1) (a) is not only cribbed, cabined and confined to newspapers and periodicals but also includes pamphlets, leaflets, handbills, circulars and every sort of publication which affords a vehicle of information and opinion.

Article 19(1) (g):
The freedom to engage in any profession, occupation, trade, industry or business, guaranteed under Article 19(1) (g).

The Press and Registration of Books Act, 1867:

This Act regulates printing presses and newspapers and makes registration with an appointed Authority compulsory for all printing presses.

Civil Defence Act, 1968: It allows the Government to make rules for the prohibition of printing and publication of any book, newspaper or other document prejudicial to the Civil Defence.

Press Council Act, 1978: Under this Act, the Press Council was reconstituted (after 1976) to maintain and improve the standards of newspaper and news agencies in India.

What is the importance of freedom of the press?

- ✓ Fundamental to a democratic society: The freedom of press is fundamental to a democratic society like India for it is helpful in strengthening democracy.
- ✓ Check on Government and Administrators: An independent press and news-media press acts as an important check on Government and Administrators.
- ✓ Voice against any social ill or wrong: It is also responsible to raise voice against any social ill or wrong.
- ✓ Strengthening a nation: It works towards strengthening the sovereignty and integrity of a nation.
- ✓ Acts for the public: At national, regional and local level, it is the public's voice, activist and guardian as well as educator, entertainer and contemporary chronicler.
- ✓ Caution in passing judgments: The press exercises caution in passing judgments, especially on matters where the due process of

law is yet to be completed.

How can freedom of press be misused?

There are often wide public outrages following the negative coverage by press.

- The press is often guilty of exhibiting a marked bias towards a certain political figure or a party or community or group.
- Freedom of the press is seen to block progress and to help businessmen make money.
- Freedom of press may divert attention of the Indian people from the real issues which are socio-economic, to non-issues.
- The press is also looked upon by its owners as a means of making money.

In conclusion

It is essential that proper reform is brought about by way of Legislation or Precedent by the Supreme Court to ensure the legitimacy of news and the "Freedom of the Press".

A regulatory body comprising both of media persons and government bodies should be established to give media a fair play and check its arbitrariness at the same time. Senior editors and journalists should start exposing cases of fake news, conflict of interest, making the working of press more transparent.

Press freedom under Article 19(1) (g) has to be secured as such to allow the public to be well informed.

GOVERNANCE ISSUES AND POLICIES

LAND ACQUISITION

Why in news?

The Joint Parliamentary Committee (JPC) on the Land Acquisition Bill, 2015, is planning to seek the eighth extension in the upcoming Parliament session. The JPC was set up in 2015 to examine the Bill after it was opposed by many political parties.

What's the bill all about?

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Amendment) Bill, 2015 seeks to Amend the Act of 2013 (LARR Act, 2013).

The Bill creates five special categories of land use:

1. defence
2. rural infrastructure
3. affordable housing
4. industrial corridors
5. infrastructure projects including Public Private Partnership (PPP) projects where the central government owns the land.

Key provisions:

The Bill exempts the five categories from provisions of the LARR Act, 2013 which requires the consent of 80% of land owners to be obtained for private projects and that of 70% of land owners for PPP projects.

The Bill allows exemption for projects in these five categories from requiring Social Impact Assessment be done to identify those affected and from the restrictions on the acquisition of irrigated multi-cropped land imposed by LARR Act 2013.

The Bill brings provisions for compensation, rehabilitation, and resettlement under other related Acts such as the National Highways Act and the Railways Act in consonance with the LARR Act.

The Bill changes acquisition of land for private companies mentioned in LARR Act, 2013 to acquisition for 'private entities'. A private entity could

What is a JPC?

A Joint Parliamentary Committee (JPC) is an ad-hoc body. It is set up for a specific object and duration. Joint committees are set up by a motion passed in one house of Parliament and agreed to by the other. The details regarding membership and subjects are also decided by Parliament.

include companies, corporations and nonprofit organisations.

WELFARE SCHEMES AND DEVELOPMENTAL GROUPS

INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS)

Why in news?

The Cabinet Committee on Economic Affairs has given its approval for continuation of Anganwadi Services, Scheme for Adolescent Girls, Child Protection Services and National Crèche Scheme till 2018. These are the sub-schemes under Umbrella Scheme "Integrated Child Development Services (ICDS)".

The aims of these schemes

Anganwadi Services aims at holistic development of children under the age of six years and its beneficiaries are children of this age group and Pregnant Women & Lactating Mothers.

The objective of the *Scheme for Adolescent Girls* is to facilitate, educate and empower Adolescent Girls so as to enable them to become self-reliant and aware citizens through improved nutrition and health status, promoting awareness about health, hygiene, nutrition, mainstreaming out of school AGs into formal/non formal education and providing information/guidance about existing public services.

The objectives of *Child Protection Services* are to provide safe and secure environment for children in conflict with law and children in need of care and protection, reduce vulnerabilities through a wide range of social protection measures, prevent actions that lead to abuse, neglect, exploitation, abandonment and separation of children from families etc., bring focus on non-institutional care, develop a platform for partnership between Government & Civil Society and establish convergence of child related social protection services.

National Creche Scheme aims at providing a safe place for mothers to leave their children while they are at work, and thus, is a measure for empowering women as it enables them to take up employment. At the same time, it is also an intervention towards protection and development of children in the age group of 6 months to 6 years.

Significance

The sub-schemes listed above are not new schemes but are continuing from the XII Five Year Plan. The programme through targeted interventions will strive to reduce the level of malnutrition, anaemia and low birth weight babies, ensure empowerment of adolescent girls, provide protection to the children who are in conflict with law, provide safe place for day-care to the children of working mothers, create synergy, ensure better monitoring, issue negative alerts for timely action, encourage States/UTs to perform, guide and supervise the line Ministries and States/UTs to achieve the targeted goals and bring more transparency.

Backgrounder:

Integrated Child Development Services (ICDS) Scheme: ICDS was launched in 1975 in accordance to the National Policy for Children in India. The scheme aims at holistic development of under-six children and providing nutritional and health support to pregnant and lactating mothers.

RESERVATION IN PRIVATE SECTOR

Why in news?

In an apparent reply to raising voices from political spectrum for reservation in private sector jobs, the Industry body Assocham insisted that at a time when the Indian economy is seeking positive triggers for growth revival, any political narrative on reservation in the private sector would bring in a big blow and will hit India's investment climate.

Ground situation

There is already a dearth of private sector investment with capacity utilisation in several sectors not going beyond 72-75%. Therefore, political parties should focus on creating an environment that helps such an economic pace that millions of jobs are created both in the public and private sectors, and should avoid sending wrong signals to the global and domestic investors.

Why it isn't a good move?

1. Impacts innovation and performance: The private sector is known for its innovation and performance and bringing the quota system in this sector would impede upon the progress of nation which is reliant on this sector for generation of new ideas and building a competitive advantage.

2. In conflict with international standards: Reservation of such kind will create a workforce incapable of meeting international standards resulting in loss in competitiveness of industries and promotion inclusion at the cost of growth.

3. Existing gaps: While there is reservation in government jobs, employment by government has fallen. Hence, it is first necessary to fill this gap.

ON MATERNITY BENEFITS

Why in news?

The amendments to the Maternity Benefit Act, which were introduced this year, in particular the provision of 26 weeks of paid maternity leave and the mandatory crèche facility, are path-breaking, but there are concerns over their feasibility. Recently, the Labour Ministry placed the financial burden of implementing these measures squarely on the employers; this legitimises these concerns.

Maternity Benefit Act

With the advent of modern age, as the number of women employees is growing, the maternity leave and other maternity benefits are becoming increasingly common.

But there was no beneficial piece of legislation in the horizon which is intended to achieve the object of doing social justice to women workers employed in factories, mines and plantation.

Objective:

Providing maternity leave and benefit to women employee to protect the dignity of motherhood by providing for the full and healthy maintenance of women and her child.

Applicability of Maternity Benefit Act, 1961

The Act is to regulate the employment of women in certain establishments for certain period before and after child-birth and to provide for maternity benefit and certain other benefits.

- It applies to every establishment being a factory, mine or plantation including any such establishment belonging to Government and to every establishment wherein persons are employed for the exhibition of equestrian, acrobatic and other performances.
- It will also apply to every shop or establishment within the meaning of any law for the time being in force in relation to shops and establishments in a State, in which ten or more persons are employed on any day of the preceding twelve months.

Key Amendment to the Act

The provisions of The Maternity Benefit (Amendment) Act, 2017 is effective from April 01, 2017. The amendments seek to improve infant mortality rate (34 per 1,000 live births) and maternal mortality rate (167 per 100,000 live births.

1. Increased Paid Maternity Leave:

   The Maternity Benefit Amendment Act has increased the duration of paid maternity leave available for women employees from the existing 12 weeks to 26 weeks. Under the Act, this benefit could be availed by women for a period extending up to 8 weeks before the expected delivery date and remaining 18 weeks can be availed post childbirth.

   For women who are expecting after having 2 children, the duration of paid maternity leave shall be 12 weeks.

2. Maternity leave for adoptive and commissioning mothers

Every woman who adopts a child shall be entitled to 12 weeks of maternity leave, from the date of adoption

3. Work from Home option:

   This may be exercised after the expiry of the 26 weeks' leave period. Depending upon the nature of work, women employees may be able to avail this benefit on terms that are mutually agreed with the employer.

4. Crèche facility

   The Act makes crèche facility mandatory for every establishment employing 50 or more employees. Women employees would be permitted to visit the crèche 4 times during the day.

The Maternity Benefit Amendment Act makes it mandatory for employers to educate women about the maternity benefits available to them at the time of their appointment.

Challenges for the implementation of the Act

1. *Cost intensive*

   The measures introduced, particularly the crèche facility, are cost-intensive and may deter employers from hiring or retaining pregnant women. A 2014 International Labour Organisation report specifically cautions against making employers solely liable for the cost of maternity benefits for this reason.

   Maternity benefits can be provided either through compulsory social insurance or public funds. The government should create a corpus fund to partially sponsor the costs to be incurred by the employer to provide maternity benefits.

2. *Less spending per child to meet the breastfeeding guidelines*

   One of the key goals of the act is to facilitate breastfeeding by working mothers. Studies have shown that health benefits that accrue to both the mother and her child by breastfeeding are more than matched by economic returns at family, enterprise and national levels.

A 2017 report released by the Global Breastfeeding Collective, led by UNICEF and the World Health Organisation, has termed breastfeeding the "best investment in global health" generating $35 in global return for every dollar invested.

But, a 'Global Breastfeeding Scorecard, 2017' released by the Collective shows that India spends an abysmal $0.15 (less than ₹ 10) per child to ensure that it meets the breastfeeding guidelines. As a result, India is poised to lose an estimated $14 billion in its economy to a high level of child mortality and growing number of deaths in women from cancers and Type II diabetes, directly attributable to inadequate breastfeeding.

In conclusion

It is time for the government to shoulder the financial responsibility of providing maternity benefits. This could be implemented by enabling employers to seek reimbursement of the expenses incurred by them in this respect.

In addition, the government must find innovative and cost-effective ways to ensure that working women are not forced to discontinue breastfeeding. A simple method is to extract breast milk and store it to be given to their children while they are away.

MEASLES & RUBELLA

Why in news?

The India Expert Advisory Group on Measles & Rubella (IEAG-MR) has commended India on the progress of the measles and rubella vaccination campaign. The group has advised for the MR vaccination campaign to cover the whole country by 2018. Presently, 13 states have been covered by the vaccination campaign.

MR campaign:

The MR campaign targets children across the country. Under the campaign, children will be given a single shot of Measles-Rubella (MR) vaccination irrespective of their previous measles/rubella vaccination status or measles/rubella disease status. MR vaccine will be provided free-of- cost across the states from session sites at schools as well as health facilities and outreach session sites.

Target group: All children aged between 9 months and less than 15 years will be

Measles and Rubella:

Measles is a deadly disease and one of the important causes of death in children. It is highly contagious and spreads through coughing and sneezing of an infected person. Measles can make a child vulnerable to life threatening complications such as pneumonia, diarrhoea and brain infection.

Rubella is generally a mild infection, but has serious consequences if infection occurs in pregnant women, causing congenital rubella syndrome (CRS), which is a cause of public health concern. CRS is characterized by congenital anomalies in the foetus and newborns affecting the eyes (glaucoma, cataract), ears (hearing loss), brain (microcephaly, mental retardation) and heart defects, causing a huge socio-economic burden on the families in particular and society in general.

covered.

YOUTH DEVELOPMENT INDEX AND REPORT

Published by: The Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, an Institute of National Importance

This is a pioneering attempt made by the Institute in 2010 which it followed up with the India Youth Development Index in 2017.

What is it?

The index tracks the trends in Youth Development across the States. The Index enables recognizing the high and low performing states, identifies the weak domains and informs the policy makers the priority areas of intervention for youth development in the states.

How is India Youth Development Index different from Global YDI?

In the India Youth Development Index 2017, the first five dimensions are retained same as that of Global YDI.

YDI for India adds a new domain, social inclusion, to assess the inclusiveness of societal progress as structural inequalities persist in Indian society. This construction helps to identify the gaps that require intensification of policy intervention.

What is the Youth Development Index?

Youth are defined as those aged 15 to 29 in the national youth policy (2014). This age-group constitutes 27.5% of India's population.

The YDI is a composite index of 18 indicators that collectively measure multi-dimensional progress on youth development in 183 countries. It has five domains measuring levels of education, health and well-being, employment and opportunity, political participation and civic participation for young people.

India has been ranked 133rd out of 183 countries in the 2016 Global Youth Development Index (YDI).

INDIA AND ITS INTERNATIONAL RELATIONS

RAM SETU

Why in news?

The Supreme Court has asked the Centre to clarify if it wants to remove the Ram Setu – the chain of limestone shoals connecting Tamil Nadu and Sri Lanka – or protect it.

What is Ram Setu?

The Ram Setu bridge – also known as the Adam's Bridge – is a 50-km stretch from Rameswaram Island in Tamil Nadu to Mannar Island in Sri Lanka. According to Indian mythology, it was built by an army of monkeys for Hindu god Ram and his warriors to cross over to Lanka to rescue Sita.

Controversy

The bridge between the coasts of Tamil Nadu and Sri Lanka has been at the centre of controversy and reached the SC, since the Sethusamudram shipping canal project was planned, requiring dredging in the area.

The project is being commissioned under the marine technology training programme of ICHR dealing with under-water archeology and research scholars will be given training for this purpose.

BILATERAL TRADE AND INVESTMENT AGREEMENT (BTIA)

Senior officials of India and European Union (EU) recently held discussions on the long-stalled free trade pact, officially dubbed as Bilateral Trade and Investment Agreement (BTIA) and expressed willingness to address issues in a time-bound manner.

Launched in 2007, the negotiations for the proposed BTIA have witnessed many hurdles with both sides having major differences on key issues like intellectual property rights, duty cut in automobile and spirits, and liberal visa regime.

The differences

The two sides have to iron out differences related to movement of professionals.

Besides demanding significant duty cuts in automobiles, the EU wants tax reduction in wines, spirits and dairy products, and a strong intellectual property regime.

On the other hand, India is asking for 'data secure nation' status to be granted by the EU. The country is among the nations not considered data secure by the EU. The matter is crucial as it will have a bearing on Indian IT companies wanting market access.

Need for a free trade agreement:

India and the EU expect to promote bilateral trade by removing barriers to trade in goods and services and investment across all sectors of the economy. Both parties believe that a comprehensive and ambitious agreement that is consistent with WTO rules and principles would open new markets and would expand opportunities for Indian and EU businesses.

The negotiations cover Trade in Goods, Trade in Services, Investment, Sanitary and Phytosanitary Measures, Technical Barriers to Trade, Trade Remedies, Rules of Origin, Customs and Trade Facilitation, Competition, Trade Defence, Government Procurement, Dispute Settlement, Intellectual Property Rights & Geographical Indications, Sustainable Development.

INTERNATIONAL AFFAIRS

THE QUAD

The regional Quadrilateral group: India, Japan, Australia and the United States (U.S) are making China restless.

What is Quadrilateral?
• The quadrilateral is a natural expression and convergence of interests between democratic countries in the Indo-Pacific region and it's a natural stepping stone from the very productive trilateral conversations, exercises, and cooperation between India, Japan, Australia and the US.

Why is it required?
• Countries that share values have an opportunity to provide alternatives to countries in the region who are seeking needed investment in their infrastructure and in their economic development.
• Such formation makes sure that they coordinate all their initiatives and provide these countries with alternatives that don't include predatory financing or unsustainable debt, that would certainly be on the agenda.

Formation of QUAD
• The 'Quad' has formed nearly a decade after the failed first attempt to bring the four countries together.
• A decade ago, the 'Quad' was formed on the initiative of Japan, with a strategic naval exercise, code named Malabar 07, in which Australia, the US and India also participated. But later Australia pulled out, apparently bowing to Chinese pressure.
• Later, then Prime Minister Manmohan Singh also backed out. China, then, perceived a probability of these countries 'ganging up' with the US -- it issued demarches to these two countries.
• In these years, the world experienced a recession, the US has lost some of its global power and influence, China has grown its military and economic might and a resurgent India has aimed to position itself as a counterweight to China in Asia.
• China's 'One Belt One Road'(OBOR) initiative which aims to create the world's largest economic platform and, along with Xi Jinping's 20 year plan to become a superpower, is worrying other global powers, resulting into formations like Quad.
• The concern is not merely about China's ambitious agenda but also over the absence of an alternative force to contain it. This explains the

emergence of 'Quad'.

The functioning of Quad
• Quad is functioning on the sidelines of the East Asian Summit at Manila.
• Diplomats from India, Australia, US and Japan sat together for first time to work out the modalities for co-operation and work out a strategy to take on an assertive China.
• China factor is the reason behind bringing the quadrilateral together. China has already put on record its displeasure over the formation of this coalition.

Quads concern over China
• Australia is troubled by China's growing interest in its land, infrastructure and politics and influence on its universities.
• Japan suspects Chinese support to North Korea which led to the two missile-launches over its territory. Aforementioned, Japan believed that China has tried to bully it on several territorial issues.
• China has border disputes with India and the recent Doklam standoff hit bilateral relations. To India's dislike, China's closeness with Pakistan, not only blocks its path into the Nuclear Suppliers Group but also work against its interests on the issue of terrorism.
• Moreover, both India and Japan will have to counter China to balance the power equation in the region.
• US already annoyed with China, sees this as an opportunity to regain its influence in the Indo-Pacific region.
• China's continuous addressal of the region as Asia Pacific clearly depicts the change in US strategy which is Washington keeping India at the centre of its game plan in Asia.

India's role
• India would have to work hard to make things work for the 'Quad'.
• India will have to push the other three countries to work towards creating an environment for free and fair trade in the region.
• Ensuring peace and stability will be India's major concern.
• India by refusing to join OBOR is charting its own strategy to connect Central Asian and Southeast Asian markets.
• There is a proposal to build a ports-based model with Japan including African countries and Australia might be willing to join the network.

• It will be in the interest of 'Quad' to provide an alternative to China globally.
• There is another proposal to promote free trade and defence cooperation across the Indian Ocean - from South China Sea to Africa, to countervail China's OBOR.

Key issues of common interest
• Key issues of common interest in the "Indo-Pacific region" were discussed, with an eye on China and the aim reaching a common ground on a "free and open" Indo-Pacific
• The boiling regional tension with China and Beijing's assertiveness over the South China Sea issue, a statement from the Australian Foreign Ministry informed that freedom of navigation figured at the 'Quad.'
• Also, part of the discussions were proliferation threats, "including North Korea's nuclear and missile issues, against which maximized pressure needs to be applied, ensuring freedom of navigation and maritime security in the Indo-Pacific, and countering terrorism and other issues.
• The officials examined ways to achieve common goals and address shared challenges in the region.
• This includes upholding the rules-based order in the Indo-Pacific and respect for international law, freedom of navigation and over flight; increases connectivity; coordinate on efforts to address the challenges of countering terrorism and upholding maritime security in the Indo-Pacific.

Hurdles on the way of Quad
• The main obstacle standing in the way remains the three countries' very different ideas of how to take on China along with, to a lesser extent, the unpredictable nature of President Donald Trump.
• But even if the four are not set on what must be done about Beijing, the grouping will likely see them work towards better cooperation on security, trade and freedom of navigation, which in turn will send a message to other countries in the region.
• The quad' is still little more than a concept. It is not a military alliance like the NATO.
• Though China's coercive behaviour has forced "like-minded democracies" to converge, it's still an amorphous alliance with an inclusive agenda.
• The near-term aim of the quad, therefore, is not "containment" of any

country (though it may certainly be perceived as such in Beijing), but to ensure that the Asia Pacific and Indian Ocean regions remain free and open for multilateral trade and commerce.
• Its stress remains on a rules-based order, connectivity ventures are not fuelled by "predatory" funding, and disputes are mitigated peacefully in accord with international jurisprudence.

In conclusion

• Though a start has been made, which is important, much will depend on interoperability, cooperation and convergence.
• Each of the sovereigns will face internal and external pressures and the challenge lies in finding areas of mutual interest amid inevitable roadblocks.

What is OBOR?
The most ambitious project of Xi Jinping announced in year 2013 is referred to as One Belt One Road.
• There are 2 components of this initiative: the Silk Road Economic Belt and the 21st Century Maritime Silk Road (exhibit

The Silk Road Economic Belt is envisioned as three routes connecting China to Europe (via Central Asia), the Persian Gulf, the Mediterranean (through West Asia), and the Indian Ocean (via South Asia).

The 21st Century Maritime Silk Road is planned to create connections among regional waterways. It focuses on improving connectivity among Asian countries Africa, China and Europe.

The main crux is to grow land routes as well as maritime routes.
• The policy is significant to China as it aims to boost its deistic growth.
• China's uses OBOR as a strategy for economic diplomacy.

What is ASEAN?
• The Association of Southeast Asian Nations (ASEAN) comprises of Indonesia, Singapore, Philippines, Malaysia, Brunei, Thailand, Cambodia, Lao PDR, Myanmar and Vietnam.
• India's relationship with ASEAN is an outcome of the significant changes in the world's political and economic scenario since the early 1990s.

What is the East Asia Summit?
The first summit was held in Kuala Lumpur, Malaysia on 14 December 2005.
• The East Asia Summit (EAS) is a forum held annually by leaders of, initially, 16 countries in the East Asian, Southeast Asian and South Asian regions.
• Membership expanded to 18 countries including the United States and Russia at the Sixth EAS in 2011.
• EAS meetings are held after annual ASEAN leaders' meetings.

• The 2007 dialogue died a premature death when Kevin Rudd-led

Australia buckled under Chinese pressure, as did the UPA government in India which strived to stay within the good books of China and subsequently kept Japan out of the annual naval exercise with the US.
• The art of diplomacy lies in finding the right balance. The emergence of 'Quad' favours India. But the emergence of China is a reality India has to deal with. Hence, India might have to build bridges with their neighbour and biggest trade partner as well.

SOUTH CHINA SEA DISPUTE

Why in news?

Southeast Asian leaders are planning to start negotiations with China on a so- called "Code of Conduct" in the disputed South China Sea. However, China has been opposed to a legally binding code.

graphic by Lindsey Burrows

The South China Sea is located at the western edge of the Pacific Ocean, to Asia's southeast. It contains a collection of reefs, islands and atolls, including the Spratly Islands, Paracel Islands and Scarborough Shoal.

China's claims:

Beijing claims 90% of the South China Sea, a maritime region believed to hold a wealth of untapped oil and gas reserves and through which roughly $4.5tn of ship-borne trade passes every year. Vietnam, Malaysia, Brunei and Taiwan also contest China's claims to islands and reef systems closer to their territory than Beijing's.

China says it follows a historical precedent set by the "nine-dash line" that Beijing drew in 1947 following the surrender of Japan. The line has been included in subsequent maps issued under Communist rule.

Importance of South China Sea:

- One of the world's most strategically vital maritime spaces.
- More oil passes through here than the Suez Canal.
- More than $5 trillion in trade flows through its waters each year. That is a third of all global maritime commerce.

INTERNATIONAL SOLAR ALLIANCE

Why in news?

A Curtain Raiser Event for the Founding Ceremony of the International Solar Alliance (ISA) was recently held at Bonn, Germany.

What is ISA?

The ISA is a treaty-based alliance of 121 prospective solar-rich Member Nations situated fully or partially between the Tropics, and aims at accelerating development and deployment of solar energy globally.

The ISA was jointly launched in 2015 by Prime Minister of India and then-President of France, H.E. François Hollande, on the side lines of the UNFCCC Conference of Parties 21 (CoP21) at Paris, France.

Significance of ISA:

More than 120 countries are geographically located in the tropics, either fully or partially. These places get ample sunlight throughout the year, making solar energy an easily available resource.

- These countries also happen to be ones where maximum growth in energy demand is expected in the coming years, considering that these are areas where current production is woefully short of requirement.
- The ISA is an effort to ensure that as these countries rapidly ramp up their electricity production, they should predominantly use solar energy and avoid fossil fuels.

In conclusion

ISA will become a treaty-based international intergovernmental organisation in December 2017. 44 countries have already signed the ISA treaty, and many more are set to join.

SOUTH ASIA ECONOMIC SUMMIT

Why in news?

Xth South Asia Economic Summit (SAES) was held at Kathmandu. More than 200 participants including ministers, members of parliaments, ambassadors, government officials, eminent experts and thinkers attending the summit.

Theme of the summit: "Deepening Economic Integration for Inclusive and Sustainable Development in South Asia".

What is SAES?

Started in 2008, South Asia Economic Summit is like Davos- World Economic Forum event in South Asia. It is a regional platform for discussing and analyzing economic and development issues and challenges faced by South Asian countries and advancing the cause of regional integration and cooperation.

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It brings together stakeholders from the government, private sector, research, academics and civil society to generate innovative and actionable ideas for consideration by the region's policymakers and SAARC.

ASIA-PACIFIC COMPUTER EMERGENCY RESPONSE TEAM (APCERT)

Why in news?

The Indian Computer Emergency Response Team (CERT-In) under the aegis of Ministry of Electronics & Information Technology organized the Asia Pacific Computer Emergency Response Team (APCERT) Conference in New Delhi. This is the 15th Conference of APCERT and first ever conference in India and South Asia and will be attended by 21 economies.

This conference covered contemporary topics around strategies of CERTs, Technology and Instruments for building trust in digitally evolving economies and best practices for handling cyber security in mobile and social media.

Theme: "Building Trust in the Digital Economy".

What is APCERT?

APCERT (Asia Pacific Computer Emergency Response Team) is a coalition of CSIRTs (Computer Security Incident Response Teams), from 13 economies across the Asia Pacific region. APCERT organizes an annual meeting called APSIRC conference, and the first conference was held in 2002 in Tokyo, Japan.

Membership: Any CSIRT from Asia Pacific Region, who is interested to furthering the objectives of APCERT, will be allowed to join as APCERT members after meeting all member accreditation requirements.

APCERT membership model has 2 levels-- Full members and General Members

CERT-In:

CERT-In (the Indian Computer Emergency Response Team) is a government-mandated information technology (IT) security organization. CERT-In was created by the Indian Department of Information Technology in 2004 and operates under the auspices of that department.

The purpose of CERT-In is to respond to computer security incidents, report on vulnerabilities and promote effective IT security practices throughout the country. According to the provisions of the Information Technology Amendment Act 2008, CERT-In is responsible for overseeing administration of the Act.

ZIMBABWE CRISIS

The military in Zimbabwe has launched a 'coup', calling it a "bloodless correction" to target "criminals" surrounding long-time leader Robert Mugabe.

Who is Robert Mugabe?

Robert Mugabe is the only leader Zimbabwe has had since it won freedom from British colonial rule in 1980. At 93, Mr. Mugabe is the world's oldest head of state. His poor health has fueled a bitter succession battle as potential replacements jockey for position. His lengthy rule has been marked by brutal repression of dissent, mass emigration, vote-rigging and economic collapse since land reforms in 2000.

What triggered the current stand-off?

The current crisis stems from a political shake-up when Mugabe decided to fire Vice President Emmerson Mnangagwa. The move caused unrest in the president's ruling ZANU-PF party and the army. Mnangagwa has support among the military and was seen as a potential successor to Mugabe.

BANK OF INTERNATIONAL SETTLEMENT (BIS)

Why in news?

RBI Governor Urjit Patel has been appointed to the Financial Stability Institute Advisory Board or the Bank of International Settlement (BIS), a global financial organisation owned by major central banks from across the world.

Financial Stability Institute:

The FSI was jointly created in 1998 by the BIS and the Basel Committee on Banking Supervision. Among other mandates, the FSI seeks to promote cross- sectoral and cross-border supervisory contacts and cooperation.

The Financial Stability Institute (FSI) of the BIS assists financial sector authorities worldwide in strengthening their financial systems.

FSI advisory board:

The Advisory Board will provide strategic advice to help the FSI continue to meet its mandate in a way that is responsive to the changing needs of its key stakeholders around the world. To achieve this objective, the Advisory Board will comprise a small but diverse group of central bank Governors, heads of financial sector supervision and chairs of standard-setting bodies and regional supervisory groups.

What is BIS?

The Bank for International Settlements (BIS) is the world's oldest international financial organization. It was established in May 1930.

It is based in Basel, Switzerland, with representative offices in Hong Kong and Mexico City.

Members:

It has 60 member central banks, representing countries from around the world that together make up about 95% of world GDP.

The mission of the BIS is to serve central banks in their pursuit of monetary and financial stability, to foster international cooperation in those areas and to act as a bank for central banks.

SHANGHAI COOPERATION ORGANIZATION

Why in news?

The Shanghai Cooperation Organization Meeting of the Ministers of Member States responsible for Foreign Economic and Foreign Trade was recently held in Russia. This is the first Ministerial Conference on Trade organized by the Shanghai Cooperation Organization after India became a full member of the Organization in June 2017.

What is it?

The Shanghai Cooperation Organisation, also known as the Shanghai Pact, is a Eurasian political, economic, and military organisation which was founded in 2001 in Shanghai by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan.

Apart from Uzbekistan, the other five countries have been a part of the Shanghai 5 since 1996. The cooperation was renamed to Shanghai Cooperation Organisation after Uzbekistan joined the organisation in 2001.

New members:

India and Pakistan joined SCO as full members in June 2017 in Astana, Kazakhstan.

The SCO counts four observer states, namely the Islamic Republic of Afghanistan, the Republic of Belarus, the Islamic Republic of Iran and the Republic of Mongolia.

Goals

➢ Strengthening mutual trust and neighbourliness among the member states

- ➢ Promoting their effective cooperation in politics, trade, the economy, research, technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas
- ➢ Making joint efforts to maintain and ensure peace, security and stability in the region
- ➢ Moving towards the establishment of a democratic, fair and rational new international political and economic order.

GENERAL STUDIES-3

INDIAN ECONOMY

NATIONAL ANTI-PROFITEERING AUTHORITY

Why in news?

The Union Cabinet has given its approval for the creation of the posts of Chairman and Technical Members of the National Anti-profiteering Authority (NAA) under GST. This paves the way for the immediate establishment of this apex body.

What is NAA?

The National Anti-profiteering Authority is tasked with ensuring the full benefits of a reduction in tax on supply of goods or services flow to the consumers. The National Anti-profiteering Authority shall be responsible for applying anti-profiteering measures in the event of a reduction in rate of GST on supply of goods or services or, if the benefit of input tax credit is not passed on to the recipients by way of commensurate reduction in prices.

Composition:

The National Anti-profiteering Authority shall be headed by a senior officer of the level of a Secretary to the Government of India and shall have four technical members from the Centre and/or the States.

Powers and functions of the authority:

In the event the National Anti-profiteering Authority confirms the necessity of applying anti-profiteering measures, it has the power to order the business concerned to reduce its prices or return the undue benefit availed along with interest to the recipient of the goods or services.

If the undue benefit cannot be passed on to the recipient, it can be ordered to be deposited in the Consumer Welfare Fund. In extreme cases the National Anti-profiteering Authority can impose a penalty on the defaulting business entity and even order the cancellation of its registration under GST.

What are anti- profiteering measures?

The "anti-profiteering" measures enshrined in the GST law provide an institutional mechanism to ensure that the full benefits of input tax credits and reduced GST rates on supply of goods or services flow to the consumers.

BAD BANK TO DEAL WITH STRESSED ASSETS

Why in news?

Asian Bankers Association Chairman Daniel Wu recently said that India's Insolvency and Bankruptcy Code is not the only way to deal with stressed borrowers and the government should look at other options, including the formation of a bad bank.

Working of a bad bank

While the government has not charted out any guidelines on the structure of a bad bank, such an institution would be largely based on the principles of an asset restructuring company (ARC), which buys bad loans from the commercial banks at a discount and tries to recover the money from the defaulter by providing a systematic solution over a period of time. Since a bad bank specialises in loan recovery, it is expected to perform better than commercial banks, whose expertise lies in lending.

Probability of success

A single government entity will be more competent to take decisions rather than 28 individual PSBs.

- It can be better handled by the government which has regulatory control and has management skillsets in public sector enterprises.

THE DEBATE OVER RASOGOLLA

West Bengal has been awarded the Geographical Indication (GI) for "Banglar Rasogolla" (Bengal rasogolla). In the backdrop, Odisha claims the origin of the sweet.

It was noted later that the GI tag was for the "Banglar Rosogolla" — the rosogolla originating in Bengal. Not the generic rosogolla (pronounced "rasgulla" across North India).

The decision for the Banglar Rosogolla
The decision for the Banglar Rosogolla has been made under the GI Act that authenticates products to either geographical locations or to communities or societies.

The struggle for the GI – TAG
For long there has been a tussle between Odisha and West Bengal about the origins of the Rasagulla. The battle between Odisha and West Bengal began in the year 2015 when it was pointed out that the origin of the sweet rosagolla existed for about 600 years.

Odisha claims it invented the rosogolla which, as the legend goes, was offered as bhog on the ninth day of the Jagannath Rath Yatra during a Niladri Bijaya ritual, to goddess Mahalakshmi in the famous Puri temple.

Bengalis have a very different view of how the rosogolla was born, claiming that it was invented in 1868 by the Kolkata-based sweetmaker Nobin Chandra Das.

Move by Odisha
In the year 2015, the state government of Odisha initiated a move to get GI status for its Pahala rasagola. It constituted three committees to establish the rasagola's Odia origin and it was underlined last year that a 16th century Odia version of the Ramayana, the Dandee Ramayana, mentions a sweet made of cheese being offered in rituals.

Has Bengal really won now?

Despite the initial exhilaration, the GI tag doesn't give the rosogolla to Bengal. It only states that "Banglar Rosogolla," which has some specific characteristics such as the way it feels in the mouth and how sweet it is,

originated in Bengal and not that the rosogolla/rasgulla itself did.

What is Geographical Indications of Goods (Registration and Protection) Act, 1999?

GI Act is an Act of the Parliament of India for protection of geographical indications in India. India, as a member of the World Trade Organization (WTO), enacted the Act to comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights.

The GI tag ensures that none other than those registered as authorized users (or at least those residing inside the geographic territory) are allowed to use the popular product name.

What is a Geographical indication?

A geographical indication (GI) is a name or sign used on products which corresponds to a specific geographical location or origin (e.g. a town, region, or country). In order to function as a GI, a sign must identify a product as originating in a given place. In addition, the qualities, characteristics or reputation of the product should be essentially due to the place of origin.

Since the qualities depend on the geographical place of production, there is a clear link between the product and its original place of production. The use of a geographical indication may act as a certification that the product possesses certain qualities, is made according to traditional methods, or enjoys a certain reputation, due to its geographical origin.

What rights does a geographical indication provide?

A geographical indication right enables those who have the right to use the indication to prevent its use by a third party whose product does not conform to the applicable standards.

However, a protected geographical indication does not enable the holder to prevent someone from making a product using the same techniques as those set out in the standards for that indication. Protection for a geographical indication is usually obtained by acquiring a right over the sign that constitutes the indication.

For what type of products can GI?

Geographical indications are typically used for agricultural products,

foodstuffs, wine and spirit drinks, handicrafts, and industrial products.

Examples of GI-tagged products

In 2004-05, Darjeeling tea became the first GI-tagged product in India. Other GI tags include Mysore silk, Jaipur blue pottery, Kashmiri pashmina, Kannauj perfume, Goa feni and Rajasthan's Thewa painting, using gold on glass.

How are GI protected?
There are three main ways to protect a geographical indication:
• so-called sui generis systems (i.e. special regimes of protection);
• using collective or certification
• methods focusing on business practices, including administrative product approval schemes.

Broadly speaking geographical indications are protected in different countries and regional systems through a wide variety of approaches and often using a combination of two or more of the approaches outlined above. These approaches have been developed in accordance with different legal traditions and within a framework of individual historical and economic conditions.

THE MOODY'S UPGRADE

Why In news?

US-based International rating agency Moody's Investors Service has upgraded India's sovereign credit rating by a notch to 'Baa2' with a stable outlook citing improved growth prospects driven by economic and institutional reforms. Moody's has revised the sovereign rating of India after a long gap of 14 years.

The decision to upgrade the ratings is underpinned by Moody's expectation that continued progress on economic and institutional reforms will enhance India's high growth potential. It will also improve large and stable financing base for government debt, and will likely contribute to a gradual decline in the general government debt burden over the medium term.

The global ratings agency, however, cautioned that high debt burden remains a constraint on the country's credit profile.

What is a credit rating?

A credit rating is an assessment of the creditworthiness of a borrower. Individuals, corporations and governments are assigned credit ratings — whoever wants to borrow money. Individuals are given 'credit scores', while corporations and governments receive 'credit ratings'.

What factors decide these ratings and what could move the Rating Up?

There are several criteria behind rating a government's creditworthiness. Among them are political risk, taxation, and currency value and labour laws.

* Another is sovereign risk where a country's central bank can change its foreign exchange regulations. These risks are taken into account and ratings assigned accordingly.
* The rating could move up if there were to be a material strengthening in fiscal metrics, combined with a strong and durable recovery of the investment cycle, probably supported by significant economic and institutional reforms
* Sustained reduction in the general government debt burden, through increased government revenues combined with a reduction in expenditures, would put positive pressure on the rating.

Rationale for upgrading the Rating to Baa2

The government is mid-way through a wide-ranging program of economic and institutional reforms.

* While a number of important reforms remain at the design phase, Moody's believes that those implemented to date will advance the government's objective of improving the business climate, enhancing productivity, stimulating foreign and domestic investment, and ultimately fostering strong and sustainable growth.
* The reform program will thus complement the existing shock-absorbance capacity provided by India's strong growth potential and improving global competitiveness.

Key elements of the reform program include

- The recently-introduced Goods and Services Tax (GST) which will promote productivity by removing barriers to interstate trade;
- improvements to the monetary policy framework by efforts to improve transparency and accountability, including through adoption of a new Fiscal Responsibility and Budget Management (FRBM) Act;
- measures to address the overhang of non-performing Assets (NPAs) in the banking system through an Insolvency and Bankruptcy Code;
- Demonetization;
- The Aadhaar system of biometric accounts and targeted delivery of benefits through the Direct Benefit Transfer (DBT) system intended to reduce informality in the economy.
- Other important measures which have yet to reach fruition include planned land and labour market reforms, which rely to a great extent on cooperation with and between the States.

India's Growth forecast by Moody's

Most of these measures by government will take time for their impact to be seen, and some, such as the GST and demonetization, have undermined growth over the near term.

- Moody's expects real GDP growth to moderate to 7% in the fiscal year ending in March 2018 (FY2017).
- However, as disruption fades, assisted by recent government measures to support SMEs and exporters with GST compliance, real GDP growth will rise to 7.5% in FY2018, with similarly robust levels of growth from FY2019 onward.
- Longer term, India's growth potential is significantly higher than most other Baa-rated sovereigns.

What is the significance of this Rating on Indian Economy?

India's sovereign credit rating is undoubtedly a welcome recognition of the country's enormous economic potential.

The ratings agency has said the reforms undertaken until now would advance the government's objective of improving the business climate, enhancing productivity, stimulating foreign and domestic investment, and ultimately fostering strong and sustainable growth.

The significance of the Rating:

- Rating will enable Government to borrow money from various sources.
- Rating shows India worth as investment destination.
- This will enable India to position itself as a destination for foreign direct investment.
- It is undoubtedly a welcome recognition of the country's enormous economic potential.

What are the constraints?

The high public debt burden remains an important constraint on India's credit profile relative to peers.

- At 68% of its GDP in 2016, general government debt in India is significantly higher than the 44% median for other similarly ranked economies.
- Rating agency sees the debt-to-GDP ratio widening by about 1 percentage point this fiscal year to 69%.
- Farm loan waivers by States, the Centre's implementation of the pay commission's award and even weaker tax receipts amid teething issues with the GST will create more fiscal burden.

In conclusion

The large pool of private savings available to finance government debt, the steps taken to enlarge the formal economy by mainstreaming more and more businesses from the informal sector, and measures aimed at improving spending efficiency through better targeting of welfare measures, as all broadly supportive of a gradual strengthening of the fiscal metrics over time.

For the economy to capitalise on this upgrade, the political leadership must stay the reform course.

ISLAMIC BANKING

The Reserve Bank of India has decided not to pursue a proposal for introduction of Islamic
banking in the country.

Why it is in news?
Islamic banking will not be introduced in India. The decision was taken after considering **the wider and equal opportunities available to all citizens to access banking and financial services**.

The issue of introduction of Islamic banking in India was examined by the **RBI and the government of India**. RBI examined and excavated the legal, technical and regulatory issues for introducing interest free banking in India.

What is Islamic banking and finance?
Islamic or Sharia banking is a finance system based on the principles of not charging interest, which is prohibited under Islam.

Some of the modes of Islamic banking/finance include *Mudarabah* (Profit and loss sharing), *Wadiah* (safekeeping), *Musharaka* (joint venture), *Murabahah* (cost plus) and *Ijar* (leasing).

Objectives:
Two basic principles behind Islamic banking are:

> ➢ Firstly, in order to be Islamic, **the banking system has to avoid interest**.
> ➢ Secondly, another Islamic principle is that **there should be no reward without risk bearing.**

This principle is applicable to both labour and capital. As no payment is allowed to labour unless it is applied to work, so no reward for capital should be allowed unless it is exposed to business risks.

How Islamic banking works?
In order to earn money without charging interest, Islamic banks use **equity-participation systems**. This means that if bank loans money to a

business, the business pays back the loan without interest, but it gives the bank a share in its profits. If the business defaults on the loan or does not earn any profits, the bank does not receive any profit either.

Salient features:

Collecting interest or "riga" is not permitted under Islamic law. Since this system of banking is grounded in Islamic principles, **all the undertakings of the banks follow Islamic morals**.

• Financial transactions within **Islamic banking are a culturally distinct form** of ethical investing.

• For example, investments involving alcohol, gambling, pork, etc. are prohibited.

What are the advantages of Islamic banking?

There are many advantages in introducing an Islamic window in the banks:

• Majority of companies in the Stock Exchange are *shariat* compliant (this number is more than the *shariat* complaint companies on the Stock Exchange in Malaysia), thus this would result in **attracting huge funds** in the domestic market alone.

• An Islamic Banking window **will encourage many from the Muslim community** to come forward and invest in projects

• India will be able to **attract huge investments** from West Asia and from those who invest only in *shariat* compliant projects.

What are the impacts of Islamic banking in India?

• India is a secular country by Constitution. Thus opening any financial institution with the name of a religion can **raise question among other religious groups**.

• There would be much of chaos for manpower in Islamic banking. There is a **lack of adequate work force** trained in Sharia banking.

• The present banking rules and regulations in India do not allow the operation of Islamic Finance in India for it creates **hurdle in achieving complete financial inclusion**.

• Section 8 of Banking Regulation Act, mandates that a banking company cannot deal in the **selling or buying or bartering of goods**, which is prevalent in Shariah-compliant structures such as Murabaha in India.

• Islamic banking may pave the way for the **entry for terrorist funding**

AGRICULTURE AND CROPPING PATTERNS

INTERNATIONAL RICE RESEARCH INSTITUTE (IRRI)

A 'rice field laboratory' named after Prime Minister Modi was recently inaugurated by Prime Minister himself at IRRI in Los Banos in Philippines.

What is it?

It is an international agricultural research and training organization known for its work in developing rice varieties that contributed to the Green Revolution in the 1960s.

IRRI is one of 15 agricultural research centers in the world that form the CGIAR (Consortium of International Agricultural Research centres, a global partnership of organizations engaged in research on food security. It is also the largest non-profit agricultural research centres in Asia.

Aim

It aims to reduce poverty and hunger, improve the health of rice farmers and consumers, and ensure environmental sustainability of rice farming.

India and the IRRI:

IRRI has successfully collaborated with Indian Council for Agricultural Research (ICAR) to introduce drought- tolerant, flood-tolerant and salt-tolerant varieties of rice in India.

The Indian government is also setting up a regional centre of the IRRI in Varanasi, the Prime Minister's constituency, to develop high-yielding rice varieties. The Varanasi Centre would help increase farmers' income by enhancing and supporting rice productivity, reducing cost of production, value addition, diversification and enhancement of farmers' skills.

INDUSTRY, INFRASTRUCTURE AND INVESTMENT

NATIONAL POWER PORTAL(NPP)

Why in news?

National Power Portal(NPP)- a Centralized Platform for Collation and Dissemination of Indian Power Sector Information, has been launched by the government.

What is NPP?

NPP is a centralised system for Indian Power Sector which facilitates online data capture/ input (daily, monthly, annually) from generation, transmission and distribution utilities in the country and disseminate Power Sector Information (operational, capacity, demand, supply, consumption etc.) through various analysed reports, graphs, statistics for generation, transmission and distribution at all India, region, state level for central, state and private sector.

Key facts:

The NPP Dashboard has been designed and developed to disseminate analyzed information about the sector through GIS enabled navigation and visualization chart windows on capacity, generation, transmission, distribution at national, state, DISCOM, town, feeder level and scheme based funding to states.

- The Dashboard would also act as the single point interface for all Power Sector Apps launched previously by the Ministry, like TARANG, UJALA, VIDYUT PRAVAH, GARV, URJA, MERIT.
- NPP is integrated with associated systems of Central Electricity Authority (CEA), Power Finance Corporation (PFC), Rural Electrification Corporation (REC) and other major utilities and would serve as single authentic source of power sector information to apex bodies, utilities for the purpose of analysis, planning, monitoring as well as for public users.

The Nodal Agency for implementation of NPP and its operational control is CEA. The systemhas been conceptualized, designed and developed by National Informatics Centre (NIC).

SAGAR KAVACH

What is it?

It is a joint security exercise organized jointly by the governments of Odisha and neighbouring West Bengal.

Aim:

It aims to further tighten the existing coastal security mechanism along the 630 km long coastline.

What it does?

"Sagar Kavach security exercise is a realistic drill to check the efficacy of the security parameters and preparedness of various security forces like the Indian Navy, Marine police force, Indian Coast Guard (ICG), Forest Department, Fisheries and district administration.

JAL MARG VIKAS PROJECT (JMVP)

Why in news?

The Inland Waterways Authority of India (IWAI) has awarded a contract to a reputed consultant for technical support services for the Multi-Modal Terminal at Haldia and new Navigation Lock at Farakka.

These projects are part of the JMVP on National Waterway -I (River Ganga), being implemented with technical and financial assistance of the World Bank.

Jal Marg Vikas Project:

The Jal Marg Vikas Project seeks to facilitate plying of vessels with capacity of 1,500-2,000 tonnes in the Haldia- Varanasi stretch of the River Ganga.

Ganga-Bhagirathi-Hooghly river system from Allahabad to Haldia was declared as National Waterway No.1. The NW-1 passes through Uttar Pradesh, Bihar, Jharkhand and West Bengal and serves major cities and their industrial hinterlands.

MEGA COASTAL ECONOMIC ZONE (CEZ)

Why in news?

The government has given the go-ahead for setting up India's first mega coastal economic zone (CEZ) at the Jawaharlal Nehru Port in Maharashtra as part of a plan to develop 14 such industrial clusters to spur manufacturing and generate jobs.

The idea is to attract large firms interested in serving the export markets as they would bring with them technology, capital, good management and links to the world markets. This in turn would help create an ecosystem around them in which productive small and medium firms would emerge and flourish.

Backgrounder:

The Union Cabinet had last year approved setting up of 14 mega CEZs under the National Perspective Plan of the Sagarmala Programme, with an aim to promote development of industrial clusters around ports, encourage port led development, reduce logistics cost and time for movement of cargo, enhance global competitiveness of India's manufacturing sector and create hubs of job creation.

What are CEZs?

CEZs are spatial economic regions comprising a group of coastal districts or districts with a strong linkage to ports in that region to tap into synergies with the planned industrial corridor projects.

Significance of CEZs:

These zones are expected to provide business-friendly ecosystem including ease of doing business, ease of exporting and importing, swift decisions on applications for environmental clearances, and speedy water and electricity connections.

'SAUBHAGYA' WEB-PORTAL

The government has launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana – 'Saubhagya' Web Portal.

What is it?

The Saubhagya Dashboard is a platform for monitoring household electrification progress, which would disseminate information on Household Electrification Status (State, District, village-wise), Household Progress on live basis, State-wise Target vs Achievement, Monthly Electrification Progress, etc.

The portal also has a feature on village electrification camps and in line with that, DISCOMs will organize camps in villages/cluster of villages for facilitating on-the-spot filling up of application forms and to complete requisite documentation to expedite release of electricity connections to households.

Saubhagya scheme:

Under the 'Saubhagya' scheme, launched in 2017, all willing households in rural areas and poor families in urban areas are given free electricity connections. There are around 4 Crore un-electrified households in the country and they are targeted for providing electricity connections by December 2018.

Implementation:

Rural Electrification Corporation Limited (REC) is the Nodal Agency for the operationalization of the scheme throughout the country.

INDIA RAP PROGRAMME:

It is an India Road Assessment Programme (IndiaRAP) that will rate highways' safety levels, and seek to eliminate the most unsafe roads.

Implementation:

The IndiaRAP programme is being supported by FedEx Express and will be hosted by the Asian Institute of Transport Development, and will work with government agencies as well as investors, researchers and NGOs to

assess existing highways and promote the use of better design to make roads safer.

The ratings are assigned on the basis of the level of safety which is 'built-in' to a road for vehicle occupants, motorcyclists, bicyclists and pedestrians. Five-star roads are the safest while one-star roads are the least safe.

SCIENCE AND TECHNOLOGY

COBOTS

Small, collaborative robots, or cobots, are gaining currency across the world, as also in India. Several firms, be it Bajaj Auto or Aurolab, have benefited from the adoption of cobots and are planning to add more to their shop floors.

What is a cobot?

A cobot is intended to work hand-in-hand with humans in a shared workspace. This is in contrast with full-fledged robots that are designed to operate autonomously or with limited guidance. They support and relieve the human operator of his excess work.

How they operate?

In an auto factory, while the the cobot tightens the bolts, the human worker places the tools in front of the cobot. In a biscuit factory, the cobot would package the biscuits while the worker segregates burnt ones not fit for consumption. In a small-scale industry, the cobot is placed on the drilling job while the worker performs a quality check.

Cobots are easy to use, flexible and safe. Unlike industrial robots, cobots don't need fencing for the protection of workers in the shop floor.

THE RISE OF THE BOTS

Bots are shaping the Internet today. Despite being around since the beginnings of the Internet, they are getting their time in the spotlight.

What are bots?

A bot is a computer programme designed to work automatically. It is mainly used to gather information on the Internet or perform repetitive jobs at a much higher rate than would be possible for a human alone.

The largest use of bots is in web spidering (web crawler), in which an automated script fetches, analyses and files information from web servers at many times the speed of a human.

Specifically, a bot is an application that performs an automated task, such as setting an alarm, telling you the weather or searching online. Some of the examples are Siri and Cortana, Microsoft's Clippy and AOL Instant Messenger's SmarterChild.

Bots are everywhere in technology, ranging from malicious bots that come with a virus to search engine spiders that crawl the Internet looking for new Web pages to add. For instance, chatbots can hold a conversation with you to accomplish a task.

What can bots do?

Today's bots can help us order food, shop for clothes, save money and find restaurants. Many bots are programmed to act like humans when you talk to them so it feels like asking a person for help instead of just typing in a search engine.

Artificial intelligence-based bots are increasingly being used by organisations and entities to provide customer care, and sales and marketing services.

Some developers and companies believe that people are tired of apps and would rather use bots. Instead of having many different apps on your phone, you could have one with multiple bots that can help with different tasks, like ordering food or checking sports scores.

Are they good or bad?

Like for every technology, there are two sides to bots as well.

One of the typical beneficial uses of a bot is to gather information. Another good use is automatic interaction using instant messaging, instant relay chat or other web interfaces. Dynamic interaction with websites is yet another way bots are used for positive purposes.

Norton defines a malicious bot as self-propagating malware that infects its host and connects back to a central server(s). Malicious bots can gather passwords, log keystrokes, obtain financial information, relay spam, and exploit back doors opened by viruses and worms, among other things.

Bots have also come under scrutiny in relation to automated accounts on Twitter and Facebook. Efforts are being made to restrict these bots from spreading misinformation on the respective platforms.

Use of Bots for malicious purposes

Malicious use of bots is the coordination and operation of an automated attack on networked computers, such as a denial-of-service attack by a botnet. A spambot is an internet bot that attempts to spam large amounts of content on the Internet, usually adding advertising links. More than 94.2% of websites have experienced a bot attack.

There are malicious bots (and botnets) of the following types:

- Spambots that harvest email addresses from contact or guestbook pages
- Downloader programs that suck bandwidthby downloading entire websites
- Viruses and worms
- DDoS attacks
- Bots are also used to buy up good seats for concerts, particularly by ticket brokers who resell the tickets.
- Bots are also used to increase views for YouTube
- Bots are used to increase traffic counts on analytics reporting to extract money from advertisers.
- Bots may be used on internet forums to automatically post inflammatory or nonsensical posts to disrupt the forum and anger users (Internet Troll).

What are the precautions and remedies?

The most widely used anti-bot technique is the use of CAPTCHA, which is a form of Turing test used to distinguish between a human user and a less-sophisticated AI-powered bot, by the use of graphically-encoded human-readable text.

Captchas, however, are not foolproof in preventing bots as they can often be circumvented by computer character recognition, security holes, and even by outsourcing captcha solving to cheap laborers.

It is important to have good anti-malware software. All software should be updated and system updates should not be ignored.

ENVIRONMENT

CLIMATE GOALS

In 2015, India made a Bonn Challenge commitment to restore 13 million hectares (Mha) of degraded land by 2020 and an additional 8 Mha by 2030 which will have potential climate benefit of 2 Gt CO2 sequestered.

India's Nationally Determined Contributions (NDCs) have also pledged to sequester 2.5 to 3 billion tonnes of CO2 equivalent additionally by 2030 through enhanced tree cover.

Work in progress

Initial government estimates suggest that to achieve this, India will need to extend tree cover on at least 28-34 million hectares, outside of the existing forest cover. As different States work to achieve these commitments, it appears that there is an over-reliance on plantations. In July this year, Madhya Pradesh planted 66 million trees in 12 hours to enter the record books, overtaking Uttar Pradesh's record.

What is The Bonn Challenge?

The Bonn Challenge is a global effort to bring 150 million hectares of deforested and degraded land into restoration by 2020 and 350 million hectares by 2030.

- Underlying the Bonn Challenge is the forest landscape restoration (FLR) approach, which aims to restore ecological integrity at the same time as improving human well-being through multifunctional landscapes.
- It could bring direct additional income opportunities for rural communities.
- The Bonn Challenge is not a new global commitment but rather a practical means of realizing many existing international commitments, including the CBD Aichi Target 15, the UNFCCC REDD+ goal, and the Rio+20 land degradation neutrality goal.
- It is an implementation vehicle for national priorities such as water and food security and rural development while contributing to the achievement of international climate change, biodiversity and land degradation commitments.

Forest landscape restoration (FLR)

It is the on-going process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes.

- FLR is more than just planting trees – it is restoring a whole landscape to meet present and future needs
- The majority of restoration opportunities are found on or adjacent to agricultural or pastoral land. In these situations, restoration must complement and not displace existing land uses.

Nationally Determined Contributions (NDCs):

196 Parties came together under the Paris Agreement to transform their development trajectories so that they set the world on a course towards sustainable development, aiming at limiting warming to 1.5 to 2 degrees C above pre-industrial levels.

- NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change, taking into account its domestic circumstances and capabilities.
- The NDC also lays emphasis on carbon sequestration through a strengthened flow of benefits to local communities that are dependent on forests and agriculture for sustenance.

Over emphasis on large-scale plantation drives

Large-scale plantation drives alone do not achieve the targets because they do not lay stress on

- species selection,
- The quality of planting materials or survival rates,
- Recognize tenure and resource rights to ensure that the benefit flows to communities,

An important success factor in large-scale tree-based programmes is security of tenure and land rights. However, to operationalize a landscape approach, we must protect healthy forest areas from deforestation, degradation and fragmentation. We must also creatively integrate trees into different land uses.

India has numerous models that are suited for different regions and farm household sizes to draw upon, and must not rely on plantation drives alone to secure environmental and developmental outcomes.

India needs to design its tree-based programmes better

Traditional and current reforestation practices are inadequate to reverse the currents of increasing deforestation and desertification. Small-scale grass roots development projects are the future for development in India.

1. *Agroforestry*: The nation practises at least 35 types of agroforestry models that combine different trees that provide timber, fruits, fodder, fuel and fertilizers with food crops.

   Agroforestry is defined as a land use system which integrates trees and shrubs on farmlands and rural landscapes to enhance productivity, profitability, diversity and ecosystem sustainability.

2. *Farmer Managed Natural Regeneration(FMNR)*

   A simple, income generating and self-promoting reforestation system called Farmer Managed Natural Regeneration (FMNR) has been developed at Maradi, Niger.

It is a low-cost land restoration technique used to combat poverty and hunger amongst poor subsistence farmers by increasing food and timber production and resilience to climate extremes. This system is based on the natural regeneration and management of tree stems from underground stumps, roots and seeds.

In India, the National Bank for Agriculture and Rural Development's (NABARD's) 'Wadi' model and the Foundation for Ecological Security's re-greening of village commons project are good examples of tree-based interventions which are proving to have great value in terms of cost-effectiveness as well as the range of benefits they deliver to communities.

Performance monitoring system and scientific evidence

As we regenerate trees through different interventions, it is critical to ensure that owners have the right to manage and use these trees.

1. *Performance monitoring system:* It is important to have in place a performance monitoring system to quantify tree survival rates and the benefits to communities.

   This can be achieved through a combination of remote sensing, crowd sourced, ground-level monitoring with support from communities and civil society organisations.

2. *Restoration Opportunities Assessment Methodology (ROAM)*

   It is critical to use scientific evidence-based methodology with a participatory approach to determine the right type of tree-based interventions most suitable to a certain land use.

   The Restoration Opportunities Assessment Methodology (ROAM) Tool is being used in 40 countries to find the best methods for landscape restoration.

   The tool includes rigorous analysis of spatial, legal and socio-economic data and draws on consultations with key stakeholders to determine the right type of interventions. In India, this tool is being piloted in Uttarakhand and Madhya Pradesh.

BANNING PET COKE AND FURNACE OIL

The Supreme Court recently requested all States and Union Territories to move forward towards a nationwide ban on the use of pet coke and furnace oil to power up industries, in a bid to fight pollution.

The court was hearing a PIL filed in 1985 by environmentalist M C Mehta who had raised the issue of air pollution in the Delhi-NCR. The Environment Bench of the Supreme Court had already ordered a ban on the industrial use of pet coke and furnace oil in the States of Uttar Pradesh, Haryana and Rajasthan.

The ban came after an Environment Pollution Control Authority Report recommended the ban on sale, distribution and use of furnace oil and pet coke in the National Capital Region (NCR).

Although, petcoke and furnace oil were officially banned in Delhi in 1996, their rampant use in neighboring states by the cement factories, dyeing units, brick kilns and other industries has turned Delhi into India's air pollution capital.

About Petcoke:
Petcoke is an exceptionally polluting form of carbon which is banned in several countries due to its severe toxicity. Petroleum coke or petcoke, is a final carbon-rich solid material that derives from oil refining.

It is categorized as a "bottom of the barrel" fuel as it is essentially residual waste material which is obtained after refining coal to extract lighter fuels like petrol. Petcoke is abundantly used in India in several manufacturing industries such as cement, steel and textile and it is generated in vast quantities by refineries as it is significantly cheaper that coal, has high calorific value and is easier to transport and store.

Composition:
Petcoke is over 90 percent carbon and emits 5 to 10 percent more carbon dioxide. (CO_2) than coal on a per-unit-of-energy basis when it is burned. Petcoke has a higher energy content therefore it emits between 30 and 80 percent more CO_2 than coal per unit of weight.

The difference between coal and coke in CO_2 production per unit energy produced depends upon the moisture in the coal (increases the CO_2 per unit energy – heat of combustion) and volatile hydrocarbon in coal and coke (decrease the CO_2 per unit energy).

What it is used for?
High grade petcoke which is low in sulphur and heavy metals can be used to make electrodes for the steel and aluminum industry.

• But the majority of petcoke manufactured globally, approximately 75-80%, is of a much lower grade, containing higher levels of sulphur and heavy metals and is used solely as fuel.

• In recent years, petcoke is also being used in captive power generation plants in India

Types of Petroleum Coke:
There are at least four basic types of petroleum coke:- needle coke, honeycomb coke, sponge coke and shot coke.

Different type of petroleum coke contains different microstructures due to difference in operating variables and nature of feedstock.

1. Needle coke, also called acicular coke, is a highly crystalline petroleum coke used in production of electrodes for the steel and aluminum industries.
2. Honeycomb coke is an intermediate coke, with ellipsoidal pores that are uniformly distributed. Compared to needle coke, honeycomb coke has a lower coefficient of thermal expansion and a lower electrical conductivity.
3. Fuel-grade coke: It is high heat and low ash content make it a decent fuel for power generation in coal-fired boilers, petroleum coke in high in sulfur and low in volatile content, and this poses environment problems with its combustion.
4. Calcined petroleum coke(CPC) is the product from calcining petroleum coke. This coke is the product of the coker unit in a crude oil refinery. The calcined petroleum coke is used to make anodes for the aluminum, steel and titanium smelting industry.

India's carbon tax model and its impact on industry
The reason for the petcoke menace in the recent years can be directly attributed to the Central Government's inherently flawed carbon tax policy.

Carbon tax was introduced in India in 2010 and has since its inception been fraught with complications due to its improper structuring and pervasive maladministration.

Among the many intrinsic loopholes in the carbon tax policy is its questionable coverage. Unlike many other jurisdictions such as Australia, the scope of India's carbon tax is myopically restricted to coal, thereby excluding other forms of greenhouse gases (GHG) emitting fuels like petcoke and furnace oil; many of which have a deeper impact on the environment and health than coal.

The main objective of carbon tax is to mitigate negative externalities of fossil fuels on the environment, and act as a pigouvian tax, logic dictates that it should be applicable on all sources of carbon emissions. Although petcoke is much more harmful than coal both from an environmental and health perspective, there is no tax or cess levied on the use or production of petcoke.

In order to circumvent the current carbon cess of Rs 400 per metric tonne on coal, cement and steel manufacturers have been heavily relying on petcoke, thereby increasing carbon emissions and air pollution. While India witnessed a decrease in coal imports by 20 million tonnes last year, petcoke imports doubled exceeding 10 million tonnes.

Loopholes in carbon tax policy:
India' carbon tax policy has always been weak and riddled with inefficiencies; however, post GST it has become positively redundant.

Earlier, proceeds from the carbon cess used to be accumulated in an earmarked non-lapsable fund known as the National Clean Energy Fund (NCEF). The NCEF was supposed to be used for funding clean energy projects and encourage industries to shift from fossil fuels to clean energy.

Currently, China and India are the leading consumers and importers of petcoke in order to catalyze rapid industrialization and economic growth. Since 2014, China has steadily been decreasing its dependence on petcoke by shifting to cleaner alternatives. India, continues to increase its consumption of petcoke and other noncarbon fossil fuels.

About Furnace oil:

Furnace oil is a dark viscous residual product used as a fuel in different types of combustion equipment.

Fuel oil is any liquid fuel that is burned in a furnace or boiler for the generation of heat or used in an engine for the generation of power, except oil shaving a flash point of approximately 42 °C (108 °F) and oils burned in cotton or wool-wick burners

Furnace Oil is one of the cheapest fuels available for industrial use. It is a by-product of petroleum refineries. This fuel is sticky, thick and glutinous in nature. Furnace oil is known by the name of fuel oil internationally and also as bunker fuel.

The fuel oil consists of lengthy chains of hydrogen and carbon mainly alkanes, cycloalkanes and aromatics.

- ✓ Furnace oil is termed for relatively heavier commercial extracts from crude oil.
- ✓ Furnace oil is largely an industrial fuel.
- ✓ It acts as a key ingredient in the generation of electricity and heat in a number of production units.
- ✓ It has been used since a long time for such purposes and has gained much importance and inevitable value.
- ✓ Fuel oil comes under the category of the heavier oils that include furnace oil, low sulfur heavy stock, residual fuel oil, lube oil, bitumen, petroleum coke, paraffin wax and other waxes which can be extracted from crude oil.
- ✓ In India, fuel oil is known and traded as furnace oil. India is blessed with ample natural resources and due to this reason, is known to be one of the fastest developing countries in the world. Furnace oil helps in the growth of the country's industries as it powers the transportation network and forms the base of various Indian industries

In Conclusion:

The Supreme Court and NGT orders relating to regulated use of Pet Coke as fuel by industries show that the Courts are willing to take positive actions toward curbing air pollution, thereby protecting people from harmful effects of industrial operations. However, the ban on Pet Coke will be disadvantageous to the industries using Pet Coke as they may have to resort to using alternate fuels or be required to install Air Pollution Control Systems to use Pet Coke, which may not be technologically and economically viable.

CLIMATE CHANGE PERFORMANCE INDEX

Released by: Environmental organisation Germanwatch.

The report was made public on the sidelines of the UN Climate Change negotiations (COP23) in Bonn.

About CCPI:

The Climate Change Performance Index (CCPI) is an instrument covering 58 countries and supposed to enhance transparency in international climate politics. Its aim is to encourage political and social pressure on those countries which have, up to now, failed to take ambitious actions on climate protection as well as to highlight countries with best-practice climate policies.

The index evaluates and compares the climate protection performance of 58 countries that are, together, responsible for more than 90% of global energy-related CO2 emissions. 80% of the evaluation is based on objective indicators of emissions trend and emissions level. 20% of the index results are built upon national and international climate policy assessments by more than 200 experts from the respective countries.

Performance of various countries:

- India is ranked 14th, an improvement from its 20th position last year. China, with its high emissions and growing energy use over the past five years, still ranks 41st.
- The bottom three of the index is formed by Korea (58), Iran (59) and Saudi Arabia (rank 60), all of which are showing hardly any progress or ambition in reducing its emissions and energy use.

Highlights of the report:

The report notes that global energy transition is taking up speed but no country is doing enough. For this, the countries have to strengthen targets and implementation.

The data show encouraging growth in renewable energy, ever cheaper prices for solar and wind energy and successes in saving energy in many

countries. This was responsible for stabilising global energy CO_2 emissions in the last three years.

But progress is achieved much too slow for a fully renewable energy based world economy in a few decades, because growing oil and gas consumption is higher than the welcomed reduction in coal use

BS -VI NORMS

Why in news?

Taking into account the serious pollution levels in Delhi and adjoining areas, Petroleum Ministry in consultation with Public Oil Marketing Companies has decided for preponement of BS-VI grade auto fuels in NCT of Delhi w.e.f 01.04.2018 instead of 01.04.2020. This measure is expected to help mitigate the problem of air pollution in NCT of Delhi and surrounding areas.

BS Norms:

Introduced in the year 2000, the Bharat norms are emission control standards put in place by the government to keep a check on air pollution. Based on the European regulations (Euro norms), these standards set specifications/limits for the release of air pollutants from equipment using internal combustion engines, including vehicles. Typically, the higher the stage, the more stringent the norms.

BS-VI Norms:

It has norms for particulate matter emission, nitrogen oxide (NOx) and sulphur content

In conclusion

Rolling out the BS VI standard nationally, skipping BS V, has significant cost implications for fuel producers and the auto-mobile industry, but its

positive impact on public health would more than compensate for the investment.

SECURITY CHALLENGES

SAMPRITI 2017

It is Joint Indo-Bangladesh Training Exercise. It is the seventh such exercise in the SAMPRITI series.

Where: The 2017 edition was recently held in Mizoram.

Aim : The exercise has been aimed to strengthen and broaden the aspects of interoperability and cooperation between the Indian and Bangladesh Armies.

GLOBAL CONFERENCE ON CYBER SPACE

Why in news?

India, for the first time ever, is all set to host the Global Conference on Cyber Space (GCCS), one of the world's largest conferences in the field of Cyber Space and related issues.

Theme for the GCCS 2017: 'Cyber4All: An Inclusive, Sustainable, Developmental, Safe and Secure Cyberspace'.

Key facts:

This is the fifth edition of GCCS wherein international leaders, policymakers, industry experts, think tanks and cyber experts will gather to deliberate on issues and challenges for optimally using cyber space.

The overall goals of GCCS 2017 are to promote the importance of inclusiveness and human rights in global cyber policy, to defend the status quo of an open, interoperable and unregimented cyberspace and to create political commitment for capacity building initiatives to address the digital divide and assist countries.

What is GCCS?

GCCS is a prestigious international conference that aims at encouraging dialogue among stakeholders of cyberspace, which has been taking place since 2011, London. Global Forum on Cyber Expertise (GFCE) for capacity building in cyber space was launched in the fourth edition of the conference held in The Hague, Netherlands.