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INDIA-ASEAN : Taking their ties to the next level

The ASEAN-India relationship is one of the corner-stones of India's foreign policy and Act East policy, having deepened across the three pillars of politico-security, economic and socio-cultural cooperation. The relationship has evolved from the "Look East Policy" enunciated in the early 1990s, which led India to become a Sectoral Partner of ASEAN in 1992, a dialogue partner in 1996 and a summit-level Partner in 2002. Since India became a Dialogue Partner of ASEAN, the collaboration has transcended the realm of functional cooperation to cover political and security dimensions.

The upgrade of this partnership to Strategic Partnership during the 20th anniversary Commemorative Summit in New Delhi in 2012 was a natural corollary to the growth of India-ASEAN relationship over the last two decades. The India-ASEAN Strategic Partnership acquired a new momentum with the announcement of the "Act-East Policy" at the 12th Summit in Nay Pyi Taw, Myanmar, in 2014. This has placed South East Asia at the core of India's Act East Policy and at the centre of our dream of an Asian century. It conveyed a clear intent on India's part to upscale its engagement with ASEAN member states.

Centuries of friendship and cooperation between India and East Asian Nations, mainly driven by cultural and geographical proximity, has culminated in strong ties. In the changing world scenario, the relationship between India and ASEAN, a bloc of ten Southeast Asian nations-Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam-has grown in a profound manner.

The "Act East Policy" that replaced the "Look East Policy" in 2014 signals a more action-oriented policy towards ASEAN in particular and East Asia in general. The policy which was originally conceived as an economic initiative, has gained political, strategic and cultural dimensions, including establishment of institutional mechanisms for dialogue and cooperation. The key principles and objectives of the "Act East Policy" are to promote economic cooperation, cultural ties and develop a strategic relationship with countries in the Asia-Pacific region through continuous engagement at bilateral, regional and multilateral levels, thereby providing the states of the North Eastern region enhanced connectivity to countries in our neighbourhood.

New Delhi has decided to boost its partnership with the four least-developed economies of ASEAN, namely Cambodia, Lao PDR, Myanmar, and Vietnam or CMLV.

India participates in a series of consultative meetings with ASEAN under the ASEAN-India Dialogue relations, which include Summit, ministerial and senior official-level meetings, and meetings at experts' level, as well as dialogue and cooperation frameworks initiated by ASEAN, such as the ASEAN Regional Forum (ARF), the Post Ministerial Conference (PMC) 10+1, the East Asia Summit (EAS), Mekong-Ganga Cooperation and Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC), which help enhance regional dialogue and accelerate regional integrity.

As a reflection of ASEAN AND India's interest to intensify their engagement, the ASEAN-India Partnership for Peace, Progress and Shared Prosperity, which sets out the roadmap for long-term ASEAN-India engagement, was signed at the 3rd ASEAN-India Summit on 30 November, 2004 in Vientiane, Lao PDR. A Plan of Action (2004-2010) was also developed to implement the Partnership. The 7th ASEAN-India Summit held in October, 2009 noted with satisfaction the steady progress in implementation of the

ASEAN-India Partnership for Peace, Progress and Shared Prosperity. The members had agreed on a new and more enhanced phase of the Plan of Action to implement the said Partnership, in order to seize the opportunities and overcome the challenges arising from the global financial crisis and evolving political and economic landscape. Subsequently, the new ASEAN-India Plan of Action for 2010-2015 was adopted at the 8th ASEAN-India Summit in Ha Noi in October, 2010.

ASEAN and India marked the 20th anniversary of their Dialogue Relations in 2012. A number of commemorative activities were carried out to signify the expansion and deepening of the Dialogue Partnership. In this connection, the ASEAN-India Eminent Persons group (EPG) was established to take stock of ASEAN-India relations over the past 20 years, existing cooperation between ASEAN and India, and to recommend measures to further strengthen ASEAN-India relations.

The silver jubilee of our dialogue partnership was launched by organising the 2nd ASEAN-India Cultural and Civilisational Conference at Jakarta on 19th January, 2017. A list of commemorative activities in 2017 has been exchanged with the ASEAN side which included a number of meaningful celebratory events, including high level meetings, business conclaves and Expo, youth and cultural festivals, car rally, sailing expedition, among others. Many other activities have been concluded, including the ASEAN-India Ministerial/Business Meet in Telecom sector on the sidelines of Telecom Expo in February, 2017, 6th Global Economic Summit with special session on Women Entrepreneurs in ASEAN, Act East Dialogue, Kolkata Dialogue, North-East Business Summit with focus on Connectivity, ASEAN-India Biztech Conference in Kuala Lumpur and ASEAN-India round table-25 years of Partnership.

In a strategic move to position India as a major Power in the region, prime Minister Modi hosted ten heads of state from ASEAN member countries as Chief Guests at the Republic Day Parade on January 26.

The guest list includes: Sultan Hassanal Bolkiah, the Sultan of Brunei, Prime Minister Hun Sen of Cambodia, President Rodrigo Roa Duterte of Philippines, Joko Widodo, the President of Indonesia, Najib Razak, Prime Minister of Malaysia, Nguyen Xuan phuc, Prime Minister of Vietnam, President Halima Yacob of Singapore, President Htin Kyaw of Myanmar, Prime Minister Prayuth Chan-Ocha of Thailand and Prime Minister Thongloun Sisoulith of Laos.

Connectivity a must for boosting India-ASEAN relations

To bolster economic and cultural ties between India and ASEAN, there is a need to focus on improving maritime, road and rail connectivity. In fact, strengthening connectivity, including land and sea connectivity, with ASEAN is one of the strategic objectives of India and ASEAN member states. Regular exchanges take place between ASEAN Connectivity Coordinating Committee (ACCC) and India on Connectivity. Prime Minister Narendra Modi had announced a line of credit of \$1 billion for facilitating connectivity projects at the 13th ASEAN-India Summit in 2015.

One important effort under the ASEAN-India Connectivity initiative is the India-Myanmar-Thailand Trilateral Highway which, when completed, will provide seamless connectivity between Moreh in India and Mae Sot in Thailand. The length of the Trilateral Highway is approximately 1360 km.

A India-Myanmar-Thailand Trilateral Task Force on Connectivity and Infrastructure has been set-up to undertake time-bound work on completion of the Trilateral Highway and also undertake negotiations on the Motor vehicles Agreement to put soft infrastructure in place simultaneously with the completion of the Trilateral Highway and other connectivity linkages.

The road which begins at the India-Myanmar border town of Moreh (in Manipur) and passes through several Myanmar towns including Tamu, Kalewa, Yargyi, Monya, Mandalay, Meiktila, Myawaddy before reaching Mae Sot in Thailand, is expected to be complete by 2020.

The Border Roads Organisation (BRO) has upgraded the 160-km Tamu-Kalewa-Kalemyo section of the highway in Myanmar at a cost of \$27.28 million. And development of a new road between Kalewa and Yargi (around 120 km) in Myanmar is ongoing. The highway also involves strengthening or rebuilding of 69 bailey bridges of World War II vintage, which would allow them to take container loads, besides passenger movement.

The four-lane highway is part of the proposed ASEAN East-West Corridor. According to officials, there is also plan to link this road with the Trans Asian Highway-1 that runs from Japan (via ferry) to Turkey, where it connects with the European highway after traversing through the Asian continent. The idea behind a busy highway is to give trade with Myanmar, Laos and Cambodia a boost.

However, there is much work to do on connectivity, both in building that connectivity and in efficiently using it once it is established. If by 2020 the Kaladan project with all its components and the Trilateral highway are in place, there will be an urgent need to have software ready by then in the form of integrated customs stations with all the paraphernalia of single windows, trade and transit protocols, road transport and logistics linkage, etc. Also, businesses have to be ready with their plans and investments along these corridors so that a transport corridor becomes a development corridor in a short span of time.

India is also working towards an early conclusion of the Agreement on Maritime Transport and opening of negotiation on the Regional Air Services Arrangement between ASEAN and India. Connectivity is a matter of strategic priority for both India and the ASEAN countries, as improved connectivity is a must for facilitating cross-regional production networks. India has announced a line of credit worth \$1 billion to promote projects that support physical and digital connectivity with ASEAN, and a Project Development Fund with a corpus of \$77 million to develop manufacturing hubs in Cambodia, Laos, Myanmar and Vietnam. India contributes to three major cooperation funds with ASEAN, namely the ASEAN-India Fund, the ASEAN-India Science and Technology Development Fund and the ASEAN-India Green Fund.

Earlier this month, the Union Cabinet approved an agreement to facilitate border crossing between India and Myanmar. The pact will facilitate regulation and harmonisation of already existing free movement rights for people residing in the border areas of both countries.

Last year, at the two-day first ASEAN-India Connectivity Summit in New Delhi, union Minister for Road Transport & Highways, Shipping, Water Resources, River Development and Ganga Rejuvenation Nitin Gadkari had announced. "India has proposed a \$1-billion line of credit to promote sea, air and road connectivity projects with ASEAN. And has set up a project development fund of \$77 million to develop manufacturing hubs in Cambodia, Laos, Myanmar and Vietnam".

India has contributed to building a sea link via Sittwe port in Myanmar in order to enable an alternative transit route through Bangladesh. According to Minister of State for External Affairs Gen VK Singh (retd), ASEAN and India are exploring the signing of an ASEAN-India Maritime Transport Cooperation Agreement. This initiative will help to enhance cooperation and communication, eliminate barriers hindering maritime transport, and establish a regional maritime transport framework system. Air and maritime connectivity could be enhanced by the greater liberalisation of the ASEAN-India cooperation in maritime transport.

Since ports and waterways are responsible for the flow of merchandise trade between ASEAN and India, investment in quality infrastructure is essential for better connectivity, trade growth, and maximum utility of resources. The government is giving special focus to developing the maritime sector and is planning to create cruise tourism (network) which can be connected to ASEAN countries. Work of dredging had started on Brahmaputra River for developing water transport channel up to Bangladesh. This will further connect India to Myanmar and other ASEAN countries.

A Bangladesh-China-India-Myanmar (BCIM) economic corridor, which connects Kolkata, Dhaka, Silchar, Imphal, Mandalay, Boashan and Kunming, covering a total length of 2,8100 km, is also part of the mega connectivity plan. However, these plans are small when compared to China's \$180-billion Belt and Road Initiative (BRI). Under the BRI, Beijing has drawn up a multi-pronged strategy to have both surface as well as maritime connectivity. China is also building high-speed rail links in Malaysia, Lao PDR, Cambodia and Indonesia, apart from metro connectivity and other projects in Vietnam.

India and ASEAN are looking at other connectivity projects including a railway link between New Delhi and Hanoi in Vietnam: the Mekong-India Economic Corridor (MIEC) connecting South and Southeast Asia: and Stilwell road and Dawei deep-sea port in Myanmar. The MIEC involves the integration of four Mekong countries-Vietnam, Myanmar, Thailand, and Cambodia-along with India connecting Ho Chi Minh City, Dawei, Bangkok, and Phnom Penh with Chennai.



Art, Culture, Society and Social & National Issues

Rashtriya Sanskriti Mahotsav-2018

Why in news?

The 7th edition of 'Rashtriya Sanskriti Mahotsav (RSM) – 2018' under the Ek Bharat Shreshtha Bharat programme was held recently in Bengaluru, Karnataka.

About Rashtriya Sanskriti Mahotsav (RSM):

- ◆ RSM was conceived by the Ministry of Culture in the year 2015 with an intent to showcase the rich cultural heritage of the Country in all its rich and varied dimensions.
- ◆ RSM aims to celebrate national integration and idea of unity in diversity of country.
- ◆ It celebrates rich culture and heritage of India.
- ◆ It aims to provide platform to bring together artists from each corner of country.
- ◆ It covers events including art forms from classical and folk, music and dance, theatre to literature and visual arts.
- ◆ It also showcases gallery of Indian art forms and tradition for the discerning audience.

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.

- ✎ It was launched to celebrate the cultural vibrancy of India while establishing a concrete mechanism to inculcate nationalism and cultural awareness among the fellow citizens of our nation.
- ✎ 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.
- ✎ 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.

The broad objectives of the initiative are as follows:

- ☑ **To CELEBRATE** the Unity in Diversity of our Nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of our Country;
- ☑ **To PROMOTE** the spirit of national integration through a deep and structured engagement between all Indian States and Union Territories through a year-long planned engagement between States;

- ☑ **To SHOWCASE** the rich heritage and culture, customs and traditions of either State for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity;
- ☑ **TO ESTABLISH** long-term engagements and
- ☑ **TO CREATE** an environment which promotes learning between States by sharing best practices and experiences.

Source: PIB

Medaram Jatara to be National Festival

Why in news?

Central government is likely to declare Medaram's Sammakka Sarakka/Saralamma Jatara a national festival this year.

Key Facts:

Once declared a national festival, Jatara can be considered for 'intangible cultural heritage of humanity' tag of United Nations Educational, Scientific and Cultural Organisation (UNESCO).

About the Medaram's Sammakka-Sarakka/Saralamma Jatara:

Sammakka-Sarakka Jatara held by forest dwelling Koya tribe of Telangana and surrounding States, is the biggest Tribal festival in Asia which is attended by one crore people on an average.

- ◆ The event is held bi-annually to honour the twin goddesses Sammakka and her daughter Sarakka.
- ◆ Several communities in Telangana society support Jatara as it is also a mythical narrative of two tribal women leaders who fought against the Kakatiya rulers who tried to annex their land and forests.
- ◆ According to the myth it was Sammakka's curse which caused gradual decline and death of Kakatiya rule.

Location of Medaram:

Medaram is a remote place in the Eturnagaram Wildlife Sanctuary, a part of Dandakaranya, the largest surviving forest belt in the Deccan.

Source: The Hindu

65th meeting of Central Advisory Board of Education

Why in news?

The 65th Meeting of the Central Advisory Board of Education (CABE) was held recently under Chairmanship of Union Human Resource Development Minister Prakash Javadekar in New Delhi.

A number of decisions were taken at the meeting, in part flowing from the agenda, and in part stemming from concerns raised by the State Governments.

Resolutions adopted at the meeting:

- ◆ Operation Digital Board will be launched in all schools in five years and will be undertaken jointly by Centre, State, Corporate Social Responsibility and community.
- ◆ It will improve quality of education. Under it, students will be empowered with 360 degree information with interesting learning experience and increase teacher accountability.
- ◆ CABE also will ensure to provide Quality, Equity, Accessibility, Accountability and Affordability in education by pro-active action and plan.
- ◆ It will also promote Swachh Bharat, Ek Bharat Shrestha Bharat, Padhe Bharat, Sugamya Bharat and physical education.
- ◆ It also resolved to promote human value education, life skill education, experiential learning to bring out good human beings out of education system.

About the Central Advisory Board of Education (CABE):

The Central Advisory Board of Education (CABE) is the highest advisory body to advise the Central and State Governments in the field of education.

- ✎ CABE is the oldest and the most important advisory body of the Government of India in education.
- ✎ It was first established in 1920 and dissolved in 1923 as a measure of economy. It was revived in 1935 and has been in existence ever since.
- ✎ The idea that there should be a central Advisory Board of Education was first put forward by the Calcutta University Commission (1917-19).

Composition of CABE:

- ✓ Chairman of the board shall be Union Minister of Human Resource Development.
- ✓ Minister of State for Human Resource Development shall be the Vice- Chairman.
- ✓ The tenure of office of members of the Board, other than the ex-officio members, shall be three years.

Functions of CABE:

- ✓ To review the progress of education from time to time.
- ✓ To appraise the extent and manner in which the education policy has been implemented by the Central and State Governments, and other concerned agencies, and to give appropriate advice in the matter.
- ✓ To advise regarding coordination between the Central and State Governments/UT Administrations, State Governments and non-governmental agencies for educational development in accordance with the education policy.
- ✓ To advise, suo motu, or on a reference made to it by the Central Government or any State Government or a Union Territory Administration or any educational question.

Source: PIB

Assam publishes first draft of National Register of Citizens**Why in news?**

The Assam government has recently released the first draft of the much-awaited National Register of Citizens (NRC) which declared 1.9 crore people of total 3.29 crore applicants as legal citizens of India.

The rest of the applications are undergoing verification and the complete list will be within 2018.

Why National Register of Citizens is being updated?

- ◆ The NRC is being compiled following a Supreme Court directive to identify illegal immigrants in Assam.
- ◆ The Supreme Court, which is monitoring the entire process, had ordered that the first draft of the NRC be published by December 31 after completing the scrutiny of over two crore claims along with that of around 38 lakh people whose documents were suspect.
- ◆ Assam faced influx from Bangladesh since the early 20th century. It is the only state having an NRC, first prepared in 1951. Since then, it had recorded 80 lakh citizens in the State.
- ◆ The process of identification of illegal immigrants in Assam has been debated and become a contentious issue in the State's politics.
- ◆ A six-year agitation demanding identification and deportation of illegal immigrants was launched by the All Assam Students' Union (AASU) in 1979. It culminated with the signing of the Assam Accord on August 15, 1985.

What is National Register of Citizens (NRC)?

- ✎ The NRC was introduced to identify illegal immigrants from Bangladesh and recognise the Indian citizens in Assam.
- ✎ It was first prepared in 1951 and Assam is the only state having this arrangement.

- ✎ Under NRC, immigrants who have documents proving that they entered Assam before 1971 will be considered Indian citizens and others have to show that their ascendants have lived in Assam even before 1971.

Source: The Hindu, Indian Express

National Youth Day and 22nd National Youth Festival

Why in news?

The National Youth Day is observed every year on 12 January to mark the birth anniversary of social reformer, philosopher, thinker and youth icon of India Swami Vivekananda.

- ◆ On the occasion of National Youth Day, the 22nd National Youth Festival (NYF) was held in New Delhi.
- ◆ This is the first time that the National Youth Festival is being organized in National Capital Region (NCR). The first National Youth Festival was held in 1995 in Bhopal.

About National Youth Festival (NYF):

NYF is the biggest Youth Festival of its kind in the Country.

Theme:

- ✎ The Theme of the Festival is 'Sankalp Se Siddhi'.

Objective:

- ✎ The objective of organizing NYF is to provide a platform to bring the youth of the country together in an attempt to provide them opportunity to showcase their talents in various activities.
- ✎ It seeks to capitalize on demographic dividend of country's youth and also capture vibrancy and fresh perspective of youth and to pledge to accomplish goal of New India.

Organizers:

- ✎ The Festival is organised by Ministry of Youth Affairs & Sports in collaboration with State Govt. of Uttar Pradesh at Gautam Buddha University.

Significance:

- ✎ The Festival also provides an arena, by creating a Mini-India, where youth interact in formal and informal settings and exchange their social and cultural uniqueness. This blend of diverse socio-cultural milieu creates 'Ek Bharat Shrestha Bharat'.
- ✎ The entire programme is designed to enhance the awareness about government initiatives and exhorting the youth to express their perceptions and concepts of how to make their initiatives more effective.

Source: PIB

Cabinet approves Zojila Pass tunnel project connecting Jammu and Kashmir

Why in news?

The Union Cabinet has approved the construction of Asia's longest bi-directional Zojila Pass tunnel at an estimated cost of Rs 6,089 crore.

Aim and objective of the project are as follows:

- ◆ The Project aims at construction of 14.150 km long 2-lane bidirectional single tube tunnel with a parallel 14.200 km long egress (escape) tunnel excluding approaches between Baltal & Minamarg in J&K.
- ◆ The main objective of the project is to provide all weather connectivity to strategically important Leh region in J&K which at moment is limited to at best 6 months because of snow on the mountainous passes and threat of avalanches. Ladakh region remains cut off from rest of the country during winter months due to heavy snowfall.

Implementation of the project:

The project will be implemented by Union Ministry of Road Transport & Highways (MoRTH) through the National Highways and Infrastructure Development Corporation Limited (NHIDCL) on Engineering, Procurement and Construction (EPC) mode.

What is the significance of the project?

- ✎ The construction of this tunnel will provide all weather safe, fast and cheap connectivity between Srinagar, Kargil and Leh.
- ✎ It will bring about all round economic and socio-cultural integration of these regions.
- ✎ It also has strategic and socio-economic importance and it will be instrument for development of economically backward districts in J&K.
- ✎ The project, on completion, will also lead to enormous boost in employment as local businesses get linked to National market and beautiful region is able to receive round the year tourist traffic.

Where is Zojila pass situated?

Zojila pass is situated at an altitude of 11,578 feet on Srinagar-Kargil-Leh National Highway which remains closed during winters (December to April) due to heavy snowfall and avalanches cutting off Leh-Ladakh region from Kashmir.

The Zojila Tunnel will be situated at an altitude of 11,578 feet on Srinagar-Kargil-Leh National Highway (NH-1A).

Source: PIB, The Hindu

Government launches online portal 'NARI'**Why in news?**

In a path breaking initiative to empower women, the Union Ministry of Women and Child Development (WCD) has recently launched an online portal NARI.

About NARI portal:

It is an online portal **developed by the Ministry of Women and Child Development (WCD)** which will provide information to women on issues affecting their lives.

What are the objectives of the portal?

- ◆ The portal aims **to provide women citizens with easy access to information on government schemes and initiatives for women.**
- ◆ The portal contains information about schemes being run by both Central as well as the States Governments.
- ◆ It provides links to the Ministries, Departments and autonomous bodies offering these schemes as well as easy access to online applications and grievance redressal.
- ◆ It will also provide tips on good nutrition, suggestions for health check-ups, information on major diseases, tips for investment and savings advice, job search and interview, information on crimes and against women and reporting procedures, contacts of legal aid cells, simplified adoption procedures and much more.

Source: PIB

India's second FTII to be set up in Arunachal**Why in news?**

Arunachal Pradesh would get its first Film and Television Institute, being set up by the Union Government as part of tapping the potential of the Northeastern region.

Key Facts

- ◆ This would be the second such one in the country.
- ◆ The first Film and Television Institute of India (FTII) was set up in Pune, an autonomous institute operating under the Information and Broadcasting Ministry.

About the FTII:

The Film and Television Institute of India (FTII) is an **autonomous institute under the Ministry of Information and Broadcasting** of the Government of India and aided by the Central Government of India.

- ✍ It is situated on the premises of the erstwhile Prabhat Film Company in Pune.
- ✍ Since its inception in 1960, FTII has become India's premier film and television institute, with its alumni becoming technicians, actors and directors in the film and television industry.
- ✍ FTII is a member of the International Liaison Centre of Schools of Cinema and Television (CILECT), an organisation of the world's leading schools of film and television.
- ✍ The FTII is registered under Societies' Registration Act of 1860.
- ✍ The Society is headed by a President, who also functions as the Chairman of the Governing Council, the Academic Council and the Standing Finance Committee.
- ✍ The Governing Council is constituted by election from among the members of the Society. The Governing Council is the apex body of the FTII and is responsible for making all major policy decisions of the Institute.

Source: The Hindu

Gender gap narrowing in higher education: HRD survey

Why in news?

The Union Ministry of Human Resource Development (HRD) has recently released the 8th All India Survey on Higher Education (AISHE) for the year 2016-17.

Highlights of the AISHE 2016-17:**Gender gap related:**

- ✍ The gender gap in India's higher educational institutions decreased by over nine lakh from 2011-12 to 2016-17 (31.5 lakh to 21.5 lakh) with girl students outnumbering men in eight disciplines in 2016-17 academic session.
- ✍ While in master's of arts, there are 160 women for every 100 men, in bachelor's of science (nursing) has 384 women for every 100 men.
- ✍ Even in the postgraduate classes of science and commerce, women have handsomely outnumbered men with 167 and 158 respectively per 100 males.
- ✍ However, in undergraduate and technical and professional courses like BTech, law or management, the enrolment is skewed in favour of males and the gap is significant.
- ✍ In Seven states — Goa, Himachal Pradesh, Meghalaya, J&K, Nagaland, Sikkim and Kerala — women in higher education have outnumbered men.

Other Key points:

- ☑ The Gross Enrolment Ratio (GER) in higher education of Indian has registered an increase from 24.5% in 2015-16 to 25.2% in 2016-17.
- ☑ India is aiming to attain GER of 30% by 2020, but it is still far behind countries like China with GER of 43.39% and US with 85.8%.

- ☑ The college density in top three states/UTs is Puducherry (49), Telangana (59) and Karnataka (53).
- ☑ There hasn't been much improvement in the internationalisation of education in the country.

About AISHE Survey:

- ◆ The AISHE Survey was initiated in the year 2011 to prepare a robust database on higher education.
- ◆ Since then, seeing the usefulness of data collected during the very first year of survey, the government decided to make this survey an annual exercise of data collection in the higher education sector.

Source: PIB

The battle of Bhima-Koregaon

Why in news?

On January 1, members of the Dalit community on their way to Bhima-Koregaon, a village near Pune, were attacked, allegedly by Hindutva forces. Following this, a State-wide bandh was called.

About the battle of Bhima-Koregaon:

The Koregaon Ranstambh (victory pillar) is a memorial for British East India Company soldiers killed in a battle on January 1, 1818, in which a small group of infantrymen — about 500 of them Mahars (a Scheduled Caste community) — held off a numerically superior force from the army of Peshwa Bajirao II. The Mahars fought alongside the British, some accounts say, because the Peshwa had scorned their offer to join his army.

Why is Koregaon-Bhima important?

- ☒ After Dr. Ambedkar visited the site on January 1, 1927, it became a place of pilgrimage for Dalits, an assertion of pride.
- ☒ In recent years, attendance has been in the lakhs, with Dalits coming from all over India. This year, the bicentenary, saw an especially large influx.

Historical underpinnings

- ☒ Sambhaji, Shivaji's son and successor, was captured by the Mughals; according to legend, he was tortured and his mutilated corpse thrown into the Bhima river.
- ☒ Govind Mahar, a Dalit, gathered the dismembered parts of his body and performed the last rites; later, Mahars of the village erected a memorial to Sambhaji.
- ☒ Govind Mahar's tomb stands near Sambhaji's in Vadhu-Budruk village, near Bhima-Koregaon.

What triggered the violence?

On December 29, a board came up in Vadhu-Budruk hailing Govind Mahar, which, locals say, irked the Marathas in the village, who believe that their ancestors performed Sambhaji's last rites. Mahar's tomb was vandalised which triggered violence.

Source: The Hindu

Delhi's Teen Murti Chowk renamed after Israeli city Haifa

Why in news?

Prime Minister Narendra Modi and his Israeli counterpart Benjamin Netanyahu recently attended a solemn ceremony at the Teen Murti Memorial in New Delhi.

Key facts

- ◆ At this occasion, the iconic Teen Murti Chowk has been renamed after the Israeli City Haifa.
- ◆ The move is aimed at being symbolic gesture of India's friendship with Israel.
- ◆ This year marks the centenary year of Battle for Haifa.

Historical significance of Battle for Haifa:

- ✎ There are various accounts of this battle – all narrate the valour with which the lancers undertook the assault on the garrisoned city protected by a joint force of Ottomans, Germany and Austria-Hungary.
- ✎ The liberation of Haifa cleared a supply route for the Allies to the city through the sea.
- ✎ During the World War I, the Israeli City Haifa was liberated from Ottoman occupation by Indian soldiers. (in 1918)
- ✎ A large number of Indian soldiers of the 15th Imperial Service Cavalry Brigade died during the battle to free the city and nearly 900 were buried in Israel.
- ✎ September 23 is celebrated as Haifa Day in India and Israel every year as a mark of respect for the soldiers who lost their lives in the battle and to mark the end of 400 years of Turkish control over the city.

About Teen Murti Memorial:

- ☑ Teen Murti Chowk was named to mark role of the three cavalry regiments.
- ☑ The three bronze statues at Teen Murti represent Hyderabad, Jodhpur and Mysore Lancers who were part of 15 Imperial Service Cavalry Brigade in British Indian Army.
- ☑ The brigade had carried out victorious assault on fortified city of Haifa also known as Battle for Haifa on September 23, 1918, during World War I.

Source: Indian Express, Economic Times

NITI Aayog initiates the first course on Sustainable Urban Planning under GIAN Program

Why in news?

The NITI Aayog has recently launched first course on Sustainable Urban planning using remote sensing and Geographic Information System (GIS) at IIT Kanpur's outreach centre in Noida.

This is first course conducted under Global Initiative on Academic Network (GIAN) Program of Union Ministry of Human Resource Development. It is actively supported by NITI Aayog and Ministry of Housing and Urban Affairs.

About the course:

- ◆ This course aims to give participants state-of-the-art remote sensing and GIS skills which will allow them to rise to the challenge of managing the rapidly changing urban environment of Indian cities.
- ◆ Focus will be on issues such as water resource management, water pollution and strategic emplacements for water treatment facilities.

Significance of the course:

This course is expected to contribute significantly to build trained manpower for the Smart Cities Mission launched by the Government on 25th June 2015 with an objective to promote sustainable and inclusive cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions.

About Global Initiative of Academic Networks (GIAN):

Global Initiative of Academic Networks (GIAN) in Higher Education is scheme of HRD Ministry launched in 2015.

Aim of GIAN:

GIAN aims at tapping the talent pool of scientists and entrepreneurs to engage with the institutes of higher education in India to augment the country's existing academic resources, accelerate the pace of quality reforms, and further strengthen India's scientific and technological capabilities.

Objectives of GIAN:

GIAN is envisaged to achieve the following objectives:

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

Source: PIB

Swachh Bharat Mission-Urban Launches Smart Star-Rating for Garbage Free Cities

Why in news?

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

About the star rating initiative:

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

The cleanliness indicators would include:

- ☑ Door to door collection
- ☑ Bulk generator compliance
- ☑ Source segregation
- ☑ Sweeping
- ☑ Scientific processing of waste
- ☑ Scientific land filling
- ☑ Plastic waste management
- ☑ Construction and demolition management
- ☑ Dump remediation & citizen grievance redressal system.

Vision statement of the star-rating protocol states that

- ☒ All cities achieve "Garbage Free" status wherein at any point of time in the day,
- ☒ No garbage or litter is found in any public, commercial or residential locations (including storm drains and water bodies) in the city (except in litter bins or transfer stations);

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

How are cities given rating?

- ✓ Cities can be rated as 1, 2, 3, 4, 5 and 7 star based on their compliance with the protocol conditions specified for each of the rating.
- ✓ Further city should be ODF (Open Defecation Free) before it could be given rating of 3 star or above. While cities may self-declare themselves as 1-star, 2-star or 4-star, MoHUA will carry out an additional verification through an independent third party to certify cities as 3-star, 5-star or 7-star. Cities will need to get recertified themselves every year to retain their star-status.

Significance of the move:

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

Source: PIB

Government names nine cities for smart makeover

Why in news?

The Union government has announced a new batch of 9 smart cities under Smart City Mission.

With the addition of these 9 smart cities in the fourth round, the total cities picked up under Smart City Mission have reached 99.

The nine cities include:

- ◆ Uttar Pradesh –Moradabad, Bareilly and Saharanpur,
- ◆ Bihar Sharif (Bihar),
- ◆ Silvassa (Dadra and Nagar Haveli),
- ◆ Erode (Tamil Nadu),
- ◆ Daman and Diu,
- ◆ Itanagar (Arunachal Pradesh) and
- ◆ Kavaratti (Lakshadweep).
- ◆ Silvasa topped the list of winners in this round.

Smart City Mission:

- ◆ The Smart City Mission is flagship scheme of Union Government that will cover 100 cities and its duration is five years (2015-16 to 2019-20).

Focus:

- ◆ The focus of mission is on sustainable and inclusive development and set examples which can be replicated in other parts of the city and other cities of the country.

Approach:

- ◆ Bottom-up approach has been the key planning principle under Smart City Mission.

Funds:

- ◆ Under the scheme, each city will get Rs.500 crore (Rs. 100 crore per year) from the Centre for implementing various projects.
- ◆ Centre is going to spend Rs. 48,000 crore over five years. States will contribute matching fund of Rs. 48,000 crore from their internal resources or through market borrowing and through private sector.

Implementation:

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

Selection:

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

Infrastructure:

There are 10 core infrastructure elements to be undertaken under Smart City Mission viz. adequate water supply; assured electricity supply; efficient urban mobility and public transport; sanitation, including solid waste management; affordable housing, especially for the poor; robust IT connectivity and digitalization; good governance, especially e-Governance and citizen participation; sustainable environment; safety and security of citizens, particularly women, children and the elderly; and health and education.

Source: Economic Times

Traditional Indian Chhau dance performance comes to Taiwan

Why in news?

A traditional Indian Chhau dance show – “Chhau Nritya: Dancing Tales from India” was staged at National Palace Museum in Taipei City recently as part of efforts to strengthen cultural exchanges between Taiwan and India.

The show was jointly organized by NPM and India-Taipei Association.

About Chhau dance:

The Chhau dance of Eastern India — **Orissa, Jharkhand, and West Bengal** – is a blend of martial traditions, temple rituals, and folk and popular performance of this region.

- ◆ The **themes** often revolve around episodes from the epics Mahabharata, Ramayana, Puranas, traditional folklore, local legends and abstract themes through the medium of dance and a music ensemble that consists primarily of indigenous drums.
- ◆ In its traditional context, the dance is intimately connected with the festivals and rituals of this region. Important among these is the **Chaitra Parva** celebrated in the month of April. The month of Chaitra celebrates the advent of spring and the start of the harvesting season.
- ◆ The melody is interwoven and is provided by reed pipes like the Mohuri, Turi-Bheri and Shehnai. Though vocal music is not used in Chhau, the melodies are based on songs from the Jhumur folk repertoire, the devotional Kirtan, classical Hindustani ‘ragas’, and traditional Oriya sources.
- ◆ Dhol, Dhumsa, Nagada, Chadchadi and Jhanj provide accompaniment to Chhau dance.
- ◆ As masks form an important feature of this dance it is called ‘**Chhau**’, which literally translates to ‘**mask**’. The performers wield weapons such as swords and shields while dancing.

- ◆ It is found in three styles named after the location where they are performed, ie. the Purulia Chau of Bengal, the Seraikella Chau of Jharkhand, and the Mayurbhanj Chau of Odisha. The dance is traditionally an all males troupe, regionally celebrated particularly during spring every year.

Location of Taiwan:

- ✍ Taiwan officially the Republic of China (ROC), is a state in East Asia.
- ✍ Its neighbours include China (officially the People's Republic of China, PRC) to the west, Japan to the northeast, and the Philippines to the south.
- ✍ Taiwan is the most populous state that is not a member of the United Nations and the largest economy outside the UN.

Source: Economic Times

Success of 'Jiyo Parsi' scheme

Why in news?

Since the government launched the Jiyo Parsi scheme in 2013 to address the Parsi community's declining population, over 130 babies were born.

- ◆ The information was furnished by the **Parzor Foundation** which is implementing the scheme along with the Union minority affairs ministry.

Reasons for decline in Parsi population in India:

The population of Parsis plunged from 1.14 lakh in 1941 to 57,264 in 2011.

- ✍ The sharp decline in the birth rate in the community — located mainly in Maharashtra's Mumbai and parts of Gujarat – is attributed to socio-psychological reasons.
- ✍ These include Parsis having late or non-marriages, its members marrying with people outside the community and also many couples not willing to have babies.

About Jiyo Parsi scheme:

- ✍ Declining population of parsi community in India is a matter of concern. Therefore, "Jiyo Parsi Publicity Phase-1" was initiated in 2013 for containing the declining trend of population of the Parsi community and reverse it to bring their population above the threshold level.
- ✍ It is a 100 per cent central sector scheme.
- ✍ The main objective of the "Jiyo Parsi" scheme is to reverse the declining trend of Parsi population by adopting a scientific protocol and structured interventions, stabilize their population and increase the population of Parsis in India.
- ✍ The scheme has two components: Medical Assistance and Advocacy/Counselling.

Source: The Hindu, Times of India, Business Standard

325 air routes awarded under UDAN-2

Why in news?

The Union Ministry of Civil Aviation has recently awarded 325 air routes under the second phase of government's flagship UDAN (Ude Desh ka Aam naagrik) regional connectivity scheme.

Key Facts:

- ◆ Out of 325 air routes, around 40% or 129 air routes were awarded to newly created category of 'priority areas' that include Jammu and Kashmir, North-eastern and hill states, Andaman and Nicobar Islands and Lakshadweep Islands.
- ◆ The routes under phase-II were awarded to 15 airlines and helicopter operators after bidding process.

About UDAN:

- ✎ The 'Ude Desh ka Aam Naagrik' RCS (Regional Connectivity Scheme) was launched in October 2016.
- ✎ The key objective of the UDAN scheme is to provide regional connectivity so that persons in regional towns are able to take affordable flights.
- ✎ It is considered as a vital component of the National Civil Aviation Policy (NCAP) which was released on June 15, 2016.
- ✎ The scheme has been launched to provide connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports.
- ✎ This is first of its kind scheme and will be implemented for a period of 10 years. As of now, 128 routes have been identified and declared in the RCS map of India.

What is the Significance?

- ☑ UDAN scheme will make flying easier and affordable for the common man.
- ☑ It is hailed as the first-of-its-kind scheme globally to stimulate regional connectivity through a market-based mechanism.
- ☑ India is already among the fastest growing aviation markets in the world. But infrastructure constraints at airports in big cities could slow down this growth. UDAN, if successful, can provide a fillip to India's aviation story. It could boost passenger numbers and provide feeder traffic to networks in big centres.
- ☑ UDAN network will cover the whole country. Accordingly, 24 airports in the western region, 17 airports in the northern region, 11 in the southern region, 12 in east and 6 in north-eastern parts of the country are proposed to be connected under UDAN.
- ☑ The scheme is expected to have positive effects on the economy in terms of employment and investment.
- ☑ The scheme will also promote tourism and balanced regional growth.
- ☑ Air connectivity has a multiplier effect on tourism, investments, economic growth, job creation. Getting the nooks and corners of India linked up, directly or indirectly, through the fastest mode of transportation can open up the country like never before.
- ☑ Cheap fares on regional routes can mean a horde of first-time fliers taking to the skies, making accessible to them new economic opportunities and quick connections in times of emergencies.

Source: PIB, The Hindu, Indian Express

Prime Minister's Shram Awards for 2016

Why in news?

The Ministry of Labour & Employment has recently announced Prime Minister's Shram Awards for the year 2016 to be awarded to 50 workers including 3 women employed in Departmental Undertakings & Public Sector Undertakings (PSUs) of Central/ State Governments and Private Sector Units employing 500 or more workers. In 2016, 34 workers are from PSUs and 16 workers are from Private Sectors.

- ◆ The awards are given in recognition of their distinguished performances, innovative abilities, outstanding contribution in the field of productivity and exhibition of exceptional courage and presence of mind.

About Shram Awards:

- ✎ The Prime Minister's Shram Awards were instituted in 1985 by the Government of India.
- ✎ This national award is conferred on workers for outstanding contributions that improve productivity, innovation, and indigenization, resulting in saving foreign exchange.
- ✎ The award is also given for long-term exceptional dedicated work.

- ✎ The objective of the Prime Ministers Shram Awards is to recognize the outstanding contributions made by workmen as defined in the Industrial Dispute Act, 1947 in organizations both in public and private sector and who have distinguished record of performance, devotion to duty of a high order, specific contribution in the field of productivity and proven innovative abilities among others.

They are four types of awards:

1. **Shram Ratna:** Rs. Two lakhs and recognition of their contribution to their field (a Sanad).
2. **Shram Bhushan:** RS. 100000 and a Sanad.
3. **Shram Vir / Shram Veerangana:** RS. 60000 and a Sanad.
4. **Shram Devi / Shram Shree:** RS. 40000 and a Sanad.

Source: PIB

Padma Awards 2018

Why in news?

Government has recently announced the list for the Padma Awards 2017 on the eve of Republic Day.

Key facts:

- ◆ The list comprises 3 Padma Vibhushan, 9 Padma Bhushan and 73 Padma Shri Awards. Total 85 Padma Awards including two duo cases has been conferred.
- ◆ With a total of the coveted 10 Padma awards to 11 nominees, including one posthumously, **Maharashtra has bagged the highest number of Padma awards in 2018.**

About Padma awards:

- ✎ The Padma awards are conferred by the President at a function in Rashtrapati Bhawan in March/April every year.
- ✎ The awards are announced on the occasion of Republic Day every year.
- ✎ Padma Awards – one of the highest civilian Awards of the country, are conferred in three categories, namely, Padma Vibhushan, Padma Bhushan and Padma Shri.
- ✎ The Awards are given in various disciplines/ fields of activities, viz.- art, social work, public affairs, science and engineering, trade and industry, medicine, literature and education, sports, civil service, etc.
- ✎ The award is normally not conferred posthumously. However, in highly deserving cases, the Government could consider giving an award posthumously if the demise of the person proposed to be honoured has been recent, say within a period of one year preceding the Republic Day on which it is proposed to announce the award.

Three categories of Padma awards are as follows:

- ☑ 'Padma Vibhushan' is awarded for exceptional and distinguished service.
- ☑ 'Padma Bhushan' is awarded for distinguished service of high order.
- ☑ 'Padma Shri' is awarded for distinguished service in any field.

Change in nomination process:

During the past three years, the common man had found space in the awards category as a result of changes made in the nomination process.

- ✎ There was a certain methodology of awarding Padma awards every year, but this entire process has been changed for the past three years.
- ✎ **Now, any citizen can nominate any person in our country.**
- ✎ Transparency has been brought about in the entire process by making it operable online.

Source: PIB

Khelo India Pledge Launched at the Khelo India School Games Carnival

Why in news?

Ministry of Youth Affairs and Sports has recently launched the PLEDGE for Khelo India at the Khelo India School Games Carnival in Delhi.

What is PLEDGE for Khelo India?

The pledge for Khelo India is a promise to participate and encourage sportsmanship spirit and it is aimed at inspiring youngsters to build mass participation and excellence in sports.

About Khelo India School Games:

- ✎ Khelo India School Games will be held at multiple venues across Delhi from January 31 to February 8, 2018.
- ✎ The program encompasses 16 sports disciplines such as Archery, Athletics, Badminton, Basketball, Boxing, Football, Gymnastics, Hockey, Judo, Kabaddi, Kho-Kho, Shooting, Swimming, Volleyball, Weightlifting and Wrestling.

About Khelo India programme:

The Khelo India Programme was launched in 2016 for building inclusive and comprehensive sports ecosystem in country.

Aim:

It aims at inculcating sports into the day to day lives of youngsters early on in their lives.

Subsumed schemes:

It subsumed earlier three different schemes into one namely:

1. Rajiv Gandhi Khel Abhiyan (RGKA),
2. National Sports Talent Search Scheme (NSTSS) and
3. Urban Sports Infrastructure Scheme (USIS).

Objective of Scheme

- ☑ Mass participation of youth in annual sports competitions through a structured competition;
- ☑ Identification of talent
- ☑ Guidance and nurturing of the talent through existing sports academies and new set up either by the central Government or State Government or in PPP mode.
- ☑ Creation of Sports Infrastructure at mofussil, Tehsil, District, State levels, etc

Source: PIB

Quota for acid attack survivors, people with disability in Government Jobs

Why in news?

The Department of Personnel and Training has written to all central government departments to ensure that 1% of each post be reserved for people with blindness and low vision; deaf and hard of hearing; locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy.

Background:

- ◆ The move to enhance reservation quota for those with learning disability and acid attack victims comes after passage of the Rights of Persons with Disabilities Act, 2016, and the notification of relevant rules in this regard.
- ◆ As per an earlier order of the DoPT, issued in 2005, 3% of the total posts were to be reserved for people with disabilities.

- ◆ Of these 1% each was for those with blindness or low vision; hearing impairment and locomotor disability or cerebral palsy.

Reservations:

- ✎ In case of direct recruitment, 4% of the total number of vacancies, up from the existing 3%, in groups A, B and C shall be reserved for people with benchmark disabilities. Benchmark disability means a person with not less than 40% of a specified disability.
- ✎ 1% posts each shall be also reserved for people suffering from autism, intellectual disability, specific learning disability and mental illness.

Grievance redressal officers:

- ✎ Under the new rules, all government organisations have been asked to appoint 'grievance redressal officers' to look into complaints.
- ✎ These officers will maintain a register of complaint carrying details such as date of complaint; name of complainant; the name of the establishment or person against whom the complaint has been lodged; the gist of the complaint and the date of disposal by the grievance redressal officer.
- ✎ Any person aggrieved with any matter relating to discrimination in employment against any person with disability may file a complaint with the grievance redressal officer of the respective government establishment.
- ✎ Every complaint shall be inquired into within two months of its registration and outcome thereof or action taken thereon shall be communicated to the complainant or person with benchmark disability.

What is Intellectual disability?

- ☑ It is a condition characterised by significant limitations both in intellectual functioning such as reasoning, learning and problem solving.
- ☑ It is in adaptive behaviour that covers a range of everyday skills.

Source: The Hindu, Economic Times



Polity & Governance, Social Justice and Social Development

AAP: Office of Profit Case

Why in news?

The Election Commission's recent decision to recommend the disqualification of 20 AAP MLAs for holding an "office of profit", will not only bring down the party's strength in the assembly to 46 but also pave the way for bye-elections in the national capital.

The EC took the decision after failing to grant a personal hearing to all the MLAs. Initially, the case was against 21 AAP MLAs but the number now stands at 20 after party MLA Jarnail Singh resigned from the post to contest against former chief minister Parkash Singh Badal in Punjab.

Background

- ◆ The row over their appointment began in 2016 when the then President Pranab Mukherjee refused to sign a bill passed by the Delhi Assembly to exempt the post of parliamentary secretary from the purview of the office of profit.
- ◆ Amid mounting criticism from the BJP and Congress over the "extra-judicial appointments", AAP contended that its MLAs did not receive any pecuniary benefits and the appointments were legal.
- ◆ The parliamentary secretaries, in their submission to the Election Commission, stated that neither have they received monetary benefits nor were assigned separate office space or cars for their official use.
- ◆ Defending the appointments, Chief Minister Arvind Kejriwal insisted that the parliamentary secretaries were working for "free". The Delhi High Court, however, set aside the appointments, further strengthening the case against the AAP MLAs.
- ◆ The post of a parliamentary secretary is equal in rank to that of a Cabinet minister. Appointments to the post are usually made by ruling parties to appease dissident members.

A day after President Ram Nath Kovind approved the Election Commission's recommendation to disqualify 20 AAP MLAs for holding 'office of profit', the affected legislators have withdrawn plea from Delhi HC seeking stay on the EC's recommendation. AAP MLAs' counsel informed the Delhi HC that their plea has become in fruituous as President has accepted EC recommendation and notification disqualifying them has been issued.

What is an office of profit?

The word 'office' has not been defined in the Constitution or the Representation of the People Act of 1951. But different courts have interpreted it to mean a position with certain duties that are more or less of public character. However, a legislator cannot be disqualified from either the Parliament or state Assembly for holding any office. It can be done for holding:

- a) An office;
- b) An office of profit;
- c) An office under the union or state government;

d) An office exempt by law from purview of disqualificatory provisions.

All four conditions have to be satisfied before an MP and MLA can be disqualified.

How do courts or EC decide whether an MP or MLA has profited from an office?

The Supreme Court, while upholding the disqualification of Jaya Bachchan from Rajya Sabha in 2006, had said, "For deciding the question as to whether one is holding an office of profit or not, what is relevant is whether the office is capable of yielding a profit or pecuniary gain and not whether the person actually obtained a monetary gain. If the office carries with it, or entitles the holder to, any pecuniary gain other than reimbursement of out of pocket/actual expenses, then the office will be an office of profit for the purpose of Article 102 (1)(a)..." However, a person who acquires a contract or license from a government to perform functions, which the government would have itself discharged, will not be held guilty of holding an office of profit. So, acquiring a gas agency from the government or holding a permit to ply does not amount to holding office of profit.

What is the underlying principle for including 'office of profit' as criterion for disqualification?

Makers of the Constitution wanted that legislators should not feel obligated to the Executive in any way, which could influence them while discharging legislative functions. In other words, an MP or MLA should be free to carry out her duties without any kind of governmental pressure.

What was the first office of profit case referred to the EC?

One of the earliest cases was in 1953. The EC had to decide whether MLAs of the Vindhya Pradesh Assembly should be disqualified for appointment as members of the district advisory council. As members, they were paid an allowance of Rs 5 for each day they stayed at the place where the meeting of the advisory council was held.

The EC was of the opinion that reimbursement of mere out-of-pocket expenses should not be held as profit. So, only members living in the district headquarters (where the meetings were being held) and still receiving allowance were deemed to hold office of profit, and 12 of 60 were disqualified.

What are the other instances of disqualification of legislators for holding office of profit?

In March 2006, President APJ Abdul Kalam disqualified Jaya Bachchan of the SP from Rajya Sabha with retrospective effect from July 14, 2004, for holding an office of profit as chairperson of the UP Film Development Council. In January 2015, UP MLAs Bajrang Bahadur Singh (BJP) and Uma Shankar Singh (BSP) were disqualified from the assembly after they were indicted by the Lokayukta for bagging government construction contracts by misusing their position.

Source: Indian Express

Supreme Court in turmoil after four judges revolt against Chief Justice

Why in news?

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

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

Divided opinion

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

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

- ◆ However, a few former judges and lawyers have sought to justify the action by asserting that the judges had no other choice as their repeated pleas to the CJI did not bring about the desired result.
- ◆ They also feel that it is more important to address the issues raised by the judges rather than find fault with them for going public.
- ◆ According to them, disapproval of the form of protest must not cloud the substance of the grievances.

It is a development that is both momentous and unfortunate

- ✍ The press conference held by four senior judges of the Supreme Court has exposed an unprecedented level of disagreement in the top echelons of the judiciary.
- ✍ It is regrettable that the banner of revolt has been raised in such a public way against the Chief Justice of India.
- ✍ Regardless of who is right in the current dispute over the administrative functioning of the CJI, the reverberations of what took place will not easily subside and will be felt for a long time to come.
- ✍ The question is whether it could have been handled internally rather than be dragged into the open like this.
- ✍ It is clear that 4 judges' grievances are rooted in their perception that CJI is misusing his administrative powers to assign cases with far-reaching consequences "selectively", disregarding conventions on allocation of judicial work.
- ✍ Logically, this is an internal matter of the judiciary, one that is best settled through deliberations in a full court meeting of all the Supreme Court judges themselves.

Cause of differences among judges

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

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

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

Government must stay away from the internal conflict in the Judiciary

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

Rather than be inexplicably silent, it must disclose its position on the Memorandum of Procedure for judicial appointments and communicate this clearly to the Supreme Court. One of the specific issues raised in the letter written by the four judges relates to this issue. They have suggested that since the Centre had not responded to the MoP, effectively it was deemed to have been accepted.

Way ahead

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

- ☑ Rather than brush away the concerns of the four judges, the Chief Justice must convene a meeting of the full court and give them a patient and careful hearing.
- ☑ Disapproval of the form of their protest must not cloud the substance of their grievances.

- ☑ The stand taken by the Bar Council of India and the Supreme Court Bar Association is also praiseworthy. Both have urged the Supreme Court judges to discuss the issues and settle them amicably by themselves.
- ☑ It is best that there is no more airing of differences in public and that this incident is regarded by posterity as an aberration rather than a precedent.

Conclusion

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

Source: Indian Express

Election Commission panel to review law barring campaigning 48 hours before poll

Why in news?

The Election Commission (EC) has constituted 14 member committee headed by Umesh Sinha to suggest changes to Section 126 of the Representation of the People Act, 1951 (RP Act) in view of social media expansion.

What is Section 126 of RP Act?

- ◆ Section 126 of RP Act, 1951 prohibits displaying any election matter by means of television or similar apparatus, during the period of 48 hours before the hour fixed for conclusion of poll in a constituency.
- ◆ It does not include social and news media under its ambit.

Terms of Reference of the Committee

- ☒ The committee will study impact of news media and social media during the “silence period” i.e. during 48 hours period prior to elections and its implication in view of Section 126 of RP Act, 1951.
- ☒ It will suggest modifications to the RP Act, 1951 and model code of conduct (MCC).
- ☒ It will also examine difficulties faced in regulating media platforms during the prohibitory 48 hours in a multi-phase election.

Need for review:

Election Commission is of the considered view that due to multifold expansion of digital and electronic media, the extant Model Code of Conduct, Section 126 of the RP Act, 1951, and other related provisions require revisiting to cater to the requirement and challenges of the present and emerging situations.

About Model Code of Conduct (MCC):

- ☑ Model Code of Conduct are the guidelines issued by the Election Commission of India for conduct of political parties and candidates during elections mainly with respect to speeches, polling day, polling booths, election manifestos, processions and general conduct.
- ☑ The aim of this Model Code of Conduct is **to ensure free and fair elections.**
- ☑ The Model Code of Conduct comes into force immediately on announcement of the election schedule by the commission. The Code remains in force till the end of the electoral process.
- ☑ The code does not have any specific statutory basis. It has only a persuasive effect.
- ☑ It contains what is known as **“rules of electoral morality”**. But this lack of statutory backing does not prevent the Commission from enforcing it.
- ☑ The Commission **issued the code for the first time in 1971 (5th Election)** and revised it from time to time.

Source: Indian Express, Economic Times

Mahadayi river water dispute

Why in news?

The row between **Goa, Karnataka and Maharashtra** over the sharing of the Mahadayi (Mandovi) river has escalated.

- ◆ With Karnataka headed for elections and the Mahadayi Water Disputes Tribunal setting a February date for the final hearing, political parties in both States have upped the ante.

What is the issue?

- ◆ The Mahadayi (called Mandovi in Goa) **originates in Karnataka and flows to Goa and Maharashtra**. The three states are locked in a protracted dispute over sharing its water for the last 30 years. Attempts at negotiations among the states were initiated by the central government way back in 1985.
- ◆ In order to divert 7.56 tmcft of water to the Malaprabha river basin, Karnataka government proposed to build canals to link Kalasa and Banduri, the tributaries of Mahadayi.
- ◆ However, objecting the move, Goa government argued that if Karnataka implemented the Kalasa-Banduri project, it would prove disastrous for the ecologically sensitive Western Ghats as the proposed project was deep inside the forest.
- ◆ Karnataka had petitioned the tribunal seeking release of 7.56 tmcft of water for Kalasa-Banduri Nala project.
- ◆ The tribunal, which gave its interim order after hearing arguments from both Karnataka and Goa, had rejected the state's plea citing various grounds including ecological damage that the project may cause.

Background

- ✍ Kalasa-Banduri project planned in 1989; Goa raised objection to it.
- ✍ Goa filed a complaint seeking setting up of a tribunal in July 2002.
- ✍ The Ministry of Water Resources kept the clearance given to Karnataka in abeyance in September 2002.
- ✍ Goa moved the Supreme Court in 2006 seeking constitution of a tribunal, withdrawing approval for any work in the basin.
- ✍ The Mahadayi Water Disputes Tribunal was set up in 2010.

About Mahadayi river:

The Mahadayi River also known as Mandovi or Mhadei river, is described as the lifeline of the Indian state of Goa.

- ☑ The river has a length of 77 km, 29 km in Karnataka and 52 km in Goa.
- ☑ It **originates** from a cluster of 30 springs **at Bhimgad in the Western Ghats in the Belgaum district of Karnataka**.
- ☑ The river has a 2,032 km² catchment area in Karnataka and a 1,580 km² catchment area in Goa.
- ☑ **Mahadayi (Mandovi) is a water deficit basin** and water diversion could impact the environment.

What is the Kalasa-Banduri Nala project?

The Kalasa-Banduri Nala is a canal project undertaken by the Government of Karnataka to divert water from the Mahadayi river to the Malaprabha.

- ✓ The project aimed to improve drinking water supply to the Districts of Belagavi, Dharwad and Gadag.

- ✓ It involves building across Kalasa and Banduri, two tributaries of the Mahadayi river to divert 7.56 TMC of water to the Malaprabha river, which supplies the drinking water needs of the said 3 districts, i.e., Dharwad, Belagavi and Gadag.
- ✓ The region is part of Karnataka's arid area, which is second only to Rajasthan in water scarcity.
- ✓ The project has been delayed for over a decade during which the state has seen two of the worst droughts in 40 years.

Source: The Hindu, Indian Express, Economic Times

25th January: National Voters Day

Why in news?

The Election Commission of India celebrated the 8th National Voters Day on January 25th.

The theme:

- ◆ The theme for this year's National Voters' Day is 'Accessible Elections' to spread awareness among voters regarding effective participation in the electoral process.
- ◆ This theme expressed ECI's pursuit of working towards making the electoral process more inclusive and friendly for Persons with Disabilities (PwDs).

Why 25th January was chosen?

- ◆ Election Commission of India was constituted on 25th January 1950.
- ◆ Thus, 25th January every year is now observed as the National Voters Day.

About National Voters' Day:

- ✍ National Voters' Day was initiated in 2011 to commemorate the foundation day of the Election Commission of India (ECI) which came into existence on 25th January 1950.
- ✍ This day is also utilized to spread awareness among voters regarding effective participation in the electoral process.

About Election Commission of India (ECI):

- ☑ ECI is permanent and independent constitutional body established directly by Constitution of India to ensure fair and fair elections in the country.
- ☑ The Election Commission operates under the authority of Constitution as per Article 324
- ☑ It is multi-member body and currently has three members including Chief Election Commissioner (CEC).

Source: PIB

Centre launches schemes for young scientists

Why in news?

The Ministry of Science & Technology has announced four new schemes to promote young scientists and researchers in the country.

Aim:

- ◆ The schemes primarily aim at early recognition and reward to young talent in the field of science.

Focus:

- ◆ They focus on youth to empower, recognize and motivate them.

Four schemes are as below:

TARE Scheme

- ✍ The scheme aims to tap latent potential of faculty working in state universities, colleges and private academic institutions who are well trained but having difficulty in pursuing their research due to varied reasons including lack of facilities, funding and guidance.

- ✎ Up to 500 TAs (Teacher Associateships) will be supported under this scheme.
- ✎ This scheme facilitates mobility of such faculty members to carryout research in well-established public funded institution such as IITs, IISc, IISERS and other National Institutions (NITs, CSIR, ICAR, ICMR labs, etc) and Central Universities located preferably nearer to institution where faculty member is working.

Overseas Visiting Doctoral Fellowship

- ☑ The scheme was instituted to enhance international mobility of Indian research students having potential to create talented pool of globally trained manpower.
- ☑ It will provide opportunity for research students to gain exposure and access to top class research facilities in academia and labs across the world.
- ☑ It will offer opportunities for up to 100 PhD students admitted in Indian institutions for gaining exposure and training in overseas universities /institutions of repute and areas of importance to country for 1 year period during their doctoral research.
- ☑ The selected fellows will be paid a monthly fellowship amount, one-time contingency/preparatory allowances to cover visa fee, airport transfer charges, medical insurance etc.

Distinguished Investigator Award (DIA)

- ☑ The scheme was initiated to recognize and reward Principal Investigators (PIs) of Department of Science and Technology (DST) projects that have performed remarkably well.
- ☑ It aims to reward best PIs of completed projects and also motivate ongoing PIs to perform exceedingly well.
- ☑ It seeks to effectively improve productivity of research undertaken and overall efficiency of research ecosystem.
- ☑ It will be one-time career award devised to specifically cater to younger scientists who have not received any other prestigious awards or fellowships.
- ☑ The award carries a fellowship and optional research grant for 3 years, based on peer review of project proposal submitted.

AWSAR (Augmenting Writing Skills for Articulating Research) Scheme

- ☑ The scheme aims to encourage, empower and endow popular science writing through newspapers, magazines, blogs, social media, etc. by young PhD Scholars and Post-Doctoral Fellows during course of their studies and research pursuits.
- ☑ It also seeks to tap tremendous potential of young scientists to popularize & communicate science and also to inculcate scientific temperament in the masses.
- ☑ The scheme also carries monetary incentive to each of 100 best entries from PhD scholars in year along with Certificate of Appreciation besides getting the story published/projected in mass media.
- ☑ In addition, three leading stories from selected hundred will be also awarded cash prize. Further, twenty entries will be selected from articles submitted exclusively by Post-Doctoral Fellows relating to their line of Research for monetary incentive and most outstanding story to be given a cash prize of Rs.1,00,000/-.

Source: PIB, The Hindu

Rapid Reporting System for the Scheme for Adolescent Girls launched

Why in news?

The Union Ministry of Women and Child Development (WCD) has launched beneficiary module (i.e. Phase -1) of Rapid Reporting System (RRS), a web based on line monitoring for Scheme for Adolescent Girls (SAG).

About the Rapid reporting system (RRS):

- ✎ The RRS portal will facilitate monitoring of SAG and take corrective measures by ensuring faster flow of information, accurate targeting of beneficiaries and reduction of leakages.
- ✎ It has been developed by Ministry of WCD in collaboration with National Informatics Centre (NIC).

About the Scheme for Adolescent Girls:

Realizing the multi-dimensional needs of out of school adolescent girls (11-14 years) owing to the onset of second growth spurt during this period and with an aim to motivate these girls to join school system, the government is implementing the Scheme for Adolescent Girls (SAG) for out of school girls in the age group of 11-14 years.

Aim:

- ☑ The scheme aims at providing them nutritional support, motivating out of school girls to go back to formal schooling or skill training under its non-nutrition component.
- ☑ It also provides nutritional support and girls are also equipped with information on health, hygiene and guidance on existing public services.

Implementation:

- ☑ It is implemented using platform of Integrated Child Development Services (ICDS) Scheme.
- ☑ Ministry of WCD is implementing scheme in selected 508 districts across country.
- ☑ Anganwadi Centres (AWCs) are focal point for delivery of services.

Funding:

- ☑ It is a centrally sponsored scheme implemented through Centre and State share in ratio of 50:50, for nutrition component 60:40 for rest of activities for State/UTs with legislation, 90:10 for NE and 3 Himalayan States and 100% for UTs without legislative assemblies.

Source: PIB

MIS portal for Anganwadi Services Training Programme launched**Why in news?**

The Union Ministry of Women and Child Development (WCD) has launched Management Information System (MIS) portal for Anganwadi Services Training Programme.

Key Facts:

- ◆ The portal has been developed by Ministry of WCD in collaboration with National Informatics Centre (NIC) for submission of applications and estimates by NGOs for carrying out Anganwadi Services (ICDS) Training through Anganwadi Workers Training Centres (AWTC) and Middle-Level Training Centres (MLTC).
- ◆ The phase 1 of portal will enable NGOs to submit proposals to respective states/UTs which in turn will process proposals and recommend requirement of funds for running programme.
- ◆ On this request, Central government will further examine proposal and release funds. It will ensure that funds are released timely and reach beneficiaries for training purpose.

Anganwadi Services Training Programme

- ✎ The Anganwadi Services Training Programme comes under Umbrella Integrated Child Development Services (ICDS) Scheme which is centrally sponsored scheme.
- ✎ The training to Anganwadi Workers (AWWs), Anganwadi Helpers (AWHs) and Supervisors at AWTCs and MLTCs is part of the Anganwadi Services.
- ✎ The AWTCs and MLTCs are run either by respective state governments/UT administrations or by NGOs under supervision of states/UTs.

- ✎ The Union Government releases funds required for implementation of scheme to states/UTs.

Source: PIB

Centre launches initiative to make 100 websites accessible to persons with disabilities

Why in news?

Under Accessible India Campaign, 100 Accessible websites of various State Governments/UTs have been launched with an aim to empower Persons with Disabilities.

What are accessible websites?

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

About Website Accessibility Project:

- ✎ The Department of Empowerment of Persons with Disabilities (Divyangjan) initiated a “Website Accessibility Project” for State Government/Union Territories under Accessible India Campaign.
- ✎ The project is implemented through **ERNET India, an autonomous scientific society under the Ministry of Electronics & Information Technology (MeitY).**
- ✎ The project aims to make total 917 websites accessible and providing funds for the same. Now 100 accessible websites are made accessible under the project.

About Accessible India Campaign:

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

Aim and vision:

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

Key facts related to the campaign:

- ✎ Accessible India Campaign is in line with the Article 9 of UNCRPD (UN Convention on the Rights of Persons with Disabilities) to which India is a signatory since 2007.
- ✎ The scheme also comes under Persons with Disabilities Act, 1995 provides for equal Opportunities and protection of rights and non-discrimination in Transport to Persons with Disabilities.
- ✎ Under the campaign, at least 50% of all the government buildings of National Capital and all the State capitals will be made fully accessible for persons with disabilities by July 2018.
- ✎ All the international airports in the country and railway stations of A1, A & B categories will be made fully accessible by July 2016.
- ✎ As per campaign drafted by Ministry of Social Justice & Empowerment, at least 10% of government owned public transport carriers in the country will be converted into fully accessible carriers for these persons by March 2018.
- ✎ It will also be ensured that at least 50% of all public documents issued by the Central Government and the State Governments meet accessibility standards for persons with disabilities by March 2018.
- ✎ A web portal and mobile application for creating a crowd sourcing platform to get information about inaccessible was also launched

Three verticals:

For creating universal accessibility for Persons with Disabilities, the campaign has been divided into three verticals: Built Environment; Transport and Information & Communication Technology (ICT) ecosystem.

Source:PIB, The Hindu

Government launches National CSR Data Portal & Corporate Data Portal**Why in news?**

The Union Ministry of Corporate Affairs (MCA) has recently launched National CSR Data Portal & Corporate Data Portal.

- ◆ The portals aim to provide easy accessibility to general public and also ensure high level of compliance.
- ◆ It will also help in institutionalizing and consolidating the CSR activities.
- ◆ The initiative is a significant step towards driving accountability and transparency for corporate India.

About National CSR Data Portal:

- ✍ The portal will capture information on Corporate Social Responsibility (CSR) activities carried out by eligible companies, filed on MCA21 registry in their financial statements.
- ✍ It will contain all filed information that can help to generate pre-defined reports with respect to expenditure across states, districts and development sectors.
- ✍ It will also provide feedback on projects to be given by registered users.
- ✍ Moreover, the open access to data will help researchers and also improve quality of data filed by companies, as well as involve intended beneficiaries in giving valuable feedback to companies.

About Corporate Data Portal:

- ✍ The portal aims at making all financial and non-financial information of companies available in user-friendly format to general public.
- ✍ It will also have facility to generate pre-defined reports and also customized reports.
- ✍ The portal will enable greater transparency and creation of tools for stronger Corporate Governance.

Significance of National CSR Data Portal & Corporate Data Portal:

- ☑ These portals are expected to bring 100% transparency in corporate governance by making public over 4-crore filings of nearly 1.2 million companies.
- ☑ They will also promote corporate transparency and accountability to public at large.
- ☑ They are also expected to become platforms for learning and sharing of ideas and information.
- ☑ They will also facilitate social audit of CSR projects and bring together CSR contributors, implementers and beneficiaries and align CSR activities with national development goals.

What is Corporate Social Responsibility?

- ☑ Corporate social responsibility, often abbreviated “CSR,” is a corporation’s initiatives to assess and take responsibility for the company’s effects on environmental and social wellbeing.
- ☑ The term generally applies to efforts that go beyond what may be required by regulators or environmental protection groups.
- ☑ CSR may also be referred to as “corporate citizenship” and can involve incurring short-term costs that do not provide an immediate financial benefit to the company, but instead promote positive social and environmental change.

Source: PIB

Maharashtra govt rolls out 1% reservation for orphans

Why in news?

Maharashtra state government has recently announced 1% reservation for orphans in government jobs and education.

Key Facts:

- ◆ The reservation, termed parallel reservation, will be provided under the general category, which means the government won't need to increase its caste reservation quota that has already reached 52%.
- ◆ Parallel reservation means, of the total jobs available under the general category, 1% will be reserved only for orphans.

Need for such policy:

- ✎ In Maharashtra, 3,900 orphans lived in government-run orphanages. The figure is apart from those living in private orphanages.

Significance of the move:

- ☑ The move will help orphans who are unable to establish their castes.
- ☑ In most cases, orphans are unaware of their caste and hence can't get reservations benefits in jobs. The decision will end injustice meted out towards them for the past many years.
- ☑ In a way, the government has accepted their guardianship.

Source: Times of India, Hindustan Times

Governors panel submits report on best practices to President

Why in news?

The Committee of Governors submitted its report '**Rajyapal –VikasKeRajdoot: Catalytic Role of Governors as Agents for Change in Society**' to President Ram Nath Kovind.

About the report submitted by the committee:

- ✎ The report has focused on key work areas of development and the role that governors can play in taking it forward.
- ✎ It describes an action-outcome framework that can be adopted by Raj Bhavans in their role as change agents and lists out potential priorities.
- ✎ It suggests governors play a mentoring role in overall implementation of developmental schemes in their states.
- ✎ The report deals with best practices that offices of governors have been adopting, issues and an action-outcome framework to deal with them.

About the Committee of Governors:

- ✎ The committee was constituted in October last year at the 48th conference of governors.
- ✎ The committee was constituted to examine the role of governors in taking forward the developmental process.

Members:

- ☑ ESL Narasimhan (Governor of Andhra Pradesh and Telangana),
- ☑ Ram Naik (Governor of Uttar Pradesh),
- ☑ Tathagata Roy (Governor of Tripura)
- ☑ Acharya Devvrat (Governor of Himachal Pradesh) and
- ☑ Banwarilal Purohit, (Governor of Tamil Nadu)

Source: The Hindu, Live Mint

Parliament to go paperless with e-Sansad and e-Vidhan

Why in news?

The Union Ministry of Parliamentary Affairs (MoPA) has proposed rolling out of e-Sansad in Parliament and e-Vidhan in State Legislatures to digitize and make their functioning paperless.

About e-Sansad and e-Vidhan:

- ◆ They are mission mode projects of Union Government under Digital India to make the functioning of Parliament and State Legislatures paperless.
- ◆ They aim to digitise and make available Parliament and state legislature documents, including debates, speeches, committee reports and questions on internet.
- ◆ MoPA is the Nodal Ministry for implementation of both the projects.

Significance of these projects:

- ✍ These projects will make functioning of Parliament and State Legislatures participative, responsive, transparent, productive and more accountable to public.
- ✍ They will make the entire Legislative process more efficient.
- ✍ They are environment-friendly initiatives in line with the Go Green initiative of the government.

Source: PIB

No viable alternative to hanging, Centre tells court

Why in news?

While responding to a query from the apex court on alternative modes of execution, the Centre told that there is no viable method presently other than hanging to execute condemned prisoners.

The Centre added that even lethal injections are unworkable and often fail.

Background:

- ◆ The court is hearing a writ petition which has sought the court's intervention to reduce the suffering of condemned prisoners at the time of death.
- ◆ The petitioner notes that a convict should not be compelled to suffer at the time of termination of his or her life. When a man is hanged to death, his dignity is destroyed, the petition says.
- ◆ The petitioner has also referred to Article 21 (Right to Life) of the Constitution and said it also included the right of a condemned prisoner to have a dignified mode of execution so that death becomes less painful.

Need for finding alternatives:

- ✍ The present procedure can be replaced with intravenous lethal injection, shooting, electrocution or gas chamber in which death is just a matter of minutes.
- ✍ While in hanging, the entire execution process takes over 40 minutes to declare prisoner to be dead, the shooting process involves not more than few minutes. In case of intravenous lethal injection, it is all over in 5 minutes.

SC's stand:

- ☑ The court had previously said a condemned convict should die in peace and not in pain. A human being is entitled to dignity even in death.
- ☑ Issuing notice, the court had earlier asked the government to consider the "dynamic progress" made in modern science to adopt painless methods of causing death.

Constitutionality of death penalty:

- ☑ The Supreme Court has already clarified that it is not questioning the constitutionality of the death penalty, which has been well settled by the court, including in Deena versus Union of India and earlier in the Bachan Singh case reported in 1980.

- ☑ **Section 354 (5), which mandates death by hanging, of the Code of Criminal Procedure** has already been upheld.

Observations made by the Law commission:

- ☑ The Law Commission in its 187th Report had noted that there was a significant increase in the number of countries where hanging has been abolished and substituted by electrocution, shooting or lethal injection as the method of execution.
- ☑ It had categorically opined that hanging is undoubtedly accompanied by intense physical torture and pain.

Source: The Hindu, Indian Express

18th All India Whips' Conference

Why in news?

The 18th All India Whips' Conference was recently inaugurated at Udaipur, Rajasthan. The conference is hosting around 90 Delegates belonging to 19 States and Centre.

About the 18th All India Whips' Conference:

- ☒ The purpose of this conference is to strengthen the parliamentary democracy, its institutions and ultimately serve the people at large.
- ☒ The conference provides a platform to Whips of various political parties – ruling as well as opposition at the Centre as well as the States to exchange their views and experiences and discuss the challenges facing them in discharge of their Parliamentary duties and evolve norms for efficient working of parliamentary machinery.

About Whip:

A whip is an important member of a political party's parliamentary body, having a central role in 'Floor Management' in both the Houses of Parliament and is responsible for discipline within the party.

Key facts about the whip:

- ☑ The importance of Whips in the Parliamentary system was acknowledged through the **First All India Whips Conference at Indore in 1952**, in the very first year of general elections to the First Lok Sabha.
- ☑ The office of whip is **neither mentioned in constitution of India nor in the Rules of the House nor in the Parliamentary Statute**. It is **based on conventions of parliamentary government**.
- ☑ However, **organizing the All India Whips Conference is one of the functions assigned to the Ministry of Parliamentary affairs**, under Government of India (Allocation of Business) Rules, 1961 made under article 77(3) of the Constitution.

What is the role of whip?

Whip's main job is ensuring that his members in Parliament and legislature vote in line with the party's official policy on important issues and make sure that the members turn out for important votes.

Significance of the office of whip:

- ☑ In the parliamentary form of Government, Whips of various political parties are the vital links of the internal organization of parties, inside the legislatures.
- ☑ The efficient and smooth functioning of Parliament and State Legislatures depends, to a considerable extent, upon the office of the Whip.
- ☑ The Whips can be rightly said to be the managers of the parties within the legislatures.

Source: PIB

Railways' bio-toilet project deeply flawed, reveals CAG report

Why in news?

The government's auditor, the Comptroller and Auditor General (CAG) in its report on bio-toilets has found 1,99,689 defects in 25,000 toilets installed in Railways.

- ◆ According to the data released by CAG to Parliament, the Indian Railways needs to buy 3,350 truckloads of cow dung at Rs 42 crore in 2018 to “recharge”— add bacteria to activate degradation — leaky, malfunctioning ‘bio-toilets’ that it has fitted on 44.8% of trains and hopes to expand to all trains by 2018.

What is the issue?

For 24 years, the Indian Railways have tried to find a solution to the 3,980 tonnes—497 truck-loads (at 8 tonnes per truck)—of excreta ejected from trains on to tracks every day. The latest effort was the installation of what are called “bio digesters” beneath train toilet seats where bacteria in a compost chamber digest excreta. But according to IIT, Madras findings, the bio-toilets are no better than “septic tanks” and the water they led out no better than “raw sewage”.

What are Bio-toilets?

- ✎ Bio-toilets are small-scale sewage-treatment systems beneath the toilet seat: Bacteria in a compost chamber digest human excreta, leaving behind water and biogases (mainly methane and carbon dioxide).
- ✎ Each bio-toilet requires 60 litres — or three large bucketfuls — of inoculum, a mix of cow dung and water. This inoculum begins the process of breaking down 3,980 tons of human excreta. Anaerobic bacteria are abundantly available in cow dung.
- ✎ Indian Railways in its commitment to provide hygienic environment to passengers and to keep station premises/tracks clean, have developed environment-friendly Bio-toilets for its passenger coaches.
- ✎ The technology has been developed jointly by Indian Railways (IR) and Defence Research & Development Organization (DRDO) for railway passenger coaches through an MoU.
- ✎ In the bio-toilet fitted coaches, human waste is collected in tanks below the toilets and the same is decomposed by a consortium of bacteria.
- ✎ This environment friendly, low cost and robust technology, is the first of its kind in Railway Systems in the world.

Bio-toilets in Indian Railways:

- ☑ The Railways ministry has provided 15,500 bio-toilets in 2015-16 in about 4,000 coaches, while till March 2015; it has fitted around 19,000 bio-toilets.
- ☑ Indian Railways has decided to provide bio-toilets in all coaches by September 19, 2019.

Source: Economic Times

Govt announces details of electoral bonds for political funding

Why in news?

The Union Government has announced details of electoral bonds for political funding that can be routed by donors to political parties.

Background:

The electoral bonds scheme was announced in Union Budget 2017 with an aim for increasing transparency in political funding. It makes India first country in the world to have such unique bonds for electoral funding.

What are Electoral bonds?

- ◆ Electoral bonds will be bearer instrument in nature of promissory note and an interest-free banking instrument.
- ◆ These can be redeemed only through the registered accounts of a political party in a prescribed time frame.

Objective:

- ✎ It aims at rooting out current system of largely anonymous cash donations made to political parties which lead to generation of black money in the economy.

Denominations:

- ✎ Electoral bonds can be purchased for any value in multiples of Rs.1,000, Rs.10,000, Rs.10 lakh, and Rs.1 crore from any of the **specified branches of State Bank of India (SBI)**.

Who can purchase?

- ☑ **A citizen of India or a body incorporated in India** will be eligible to purchase the bond.
- ☑ The purchaser is allowed to buy electoral bonds only on due fulfilment of all extant KYC norms and by making payment from a bank account. It will **not carry the name of the payee**.
- ☑ In essence, the donor and the party details will be available with the bank, but the political party might not be aware of who the donor is.

Eligibility of Political parties:

- ☑ Every party that is registered under section 29A of the Representation of the Peoples Act, 1951 (43 of 1951) and has secured at least one per cent of the votes polled in the most recent Lok Sabha or State election will be allotted a verified account by the Election Commission of India. Electoral bond transactions can be made only via this account.

Validity:

- ☑ It will have a life of 15 days during which they can be used to make donations to registered political parties.

Availability:

- ☑ The electoral bonds will be available for purchase for a period of 10 days each in months of January, April, July and October with additional 30 days to be specified by Central government in year of general election so that this does not become a parallel currency.

Source: The Hindu, Live Mint

Nagaland declared as 'disturbed area' for 6 more months**Why in news?**

Under the controversial Armed Forces (Special Powers) Act (AFSPA), the entire Nagaland has been declared as "disturbed area" for six more months, till June- end.

Implications of the move:

- ◆ The decision to continue the declaration of Nagaland as "disturbed area" has been taken as killings; loot and extortion have been going in various parts of the state which necessitated the action for the convenience of the security forces operating there.

AFSPA in Nagaland:

- ◆ The AFSPA has been in force in Nagaland for several decades. It has not been withdrawn even after a framework agreement was signed in August 2015 between the Naga insurgent group NSCN-IM and the government.
- ◆ The framework agreement came after over 80 rounds of negotiations spanning 18 years with the first breakthrough in 1997 when the ceasefire agreement was sealed after decades of insurgency in Nagaland.

About AFSPA:

- ◆ Armed Forces (Special Powers) Act (AFSPA), is an Act of the Parliament of India that grant special powers to the Indian Armed Forces in what each act terms “disturbed areas”.

Why is this required?

- ◆ The government (either the state or centre) considers those areas to be ‘disturbed’ “by reason of differences or disputes between members of different religious, racial, language or regional groups or castes or communities.”

Under which conditions AFSPA can be declared?

- ◆ When the local administration fails to deal with local issues and the police proves inefficient to cope with them.
- ◆ When the scale of unrest or instability in the state is too large for the police to handle.

How does one officially declare a region to be ‘disturbed’?

- ✍ Section (3) of the AFSPA Act empowers the governor of the state or Union territory to issue an official notification on The Gazette of India, following which the centre has the authority to send in armed forces for civilian aid.
- ✍ It is still unclear whether the governor has to prompt the centre to send in the army or whether the centre on its own sends in troops.
- ✍ Once declared ‘disturbed’, the region has to maintain status quo for a minimum of three months, according to The Disturbed Areas (Special Courts) Act, 1976.

What about the state government’s role?

The state governments can suggest whether the Act is required to be enforced or not. But under Section (3) of the Act, their opinion can still be overruled by the governor or the centre.

Source: The Hindu

Parliamentary panel concerned over delay in setting up telecom ombudsman**Why in news?**

A Parliamentary panel has expressed concern over delay in setting up of an ombudsman to deal with consumer grievances in the telecom sector despite the regulator TRAI recommending it twice.

Background:

- ◆ Early this year, TRAI has recommended to the government that an Office of Telecom Ombudsman needs to be established to address grievances of telecom consumers and to have a new funding mechanism for it.

What TRAI has proposed?

The ombudsman can be **established under rules framed by the Centre**, similar to the institution of the insurance ombudsman under the Redress of Public Grievances Rules, 1998 (RPG Rules).

- ✍ The government may, by notification, make rules for carrying out the purposes of this Act.
- ✍ Alternatively, the government can choose to create the ombudsman office through a legislation to be passed by Parliament.
- ✍ A **three-stage grievance redress mechanism** for telecom sector is proposed that includes — resolution by telecom service providers (TSPs), resolution by Consumer Grievance Redressal Forum (CGRF) — and determination by Telecom Ombudsman.

What would be the role of ombudsman?

- ✍ According to TRAI recommendations, the consumer should in the first instance approach the complaint centre of the TSP to seek a solution. It will be the duty of the TSP to look into the request and address the consumer’s concerns within the time frames stipulated by the Authority.

- ✎ In case, the TSP fails to resolve the complaint in a manner that is satisfactory to the consumer; or does not provide a response; or fails to do so within the prescribed time lines laid down by TRAI, the customer will have the option to seek further redress through an independent mechanism.
- ✎ This would consist of a process of a resolution based on fact finding by Consumer Grievance Redressal Forum (CGRF), followed by, if necessitated, determination by the telecom ombudsman.

Funding of an ombudsman:

- ✎ A portion of the existing, not in addition, licence fee, is recommended as the funding mechanism for Ombudsman.
- ✎ And in addition to this fixed fee, there will be a variable component payable by each telecom service provider (TSP) depending on the volume of complaints being filed against it and admitted before the ombudsman's office.

Need for an ombudsman:

- ✎ Existing grievance redressal mechanism for telecom is 'grossly inadequate'. There is a need for an independent and appropriately empowered structure to be created for resolution of grievances of telecom consumers.
- ✎ As per the current trends, on an average around 10 million complaints are lodged with the TSPs each quarter and currently complaints are characterised by high volumes, low-value and from users in diverse geographic locations. Therefore, such regulations (ombudsman) were required to address to consumers in a speedy manner.
- ✎ This is also necessary keeping in view of the major changes that has taken place in the Indian telecom sector in the recent past.
- ✎ Urgent steps should be taken to amend the Consumer Protection Act in order to include telecom consumer complaints and financial claims of customers under its ambit.
- ✎ Earlier, the Consumer Protection Act was applicable to telecom cases — large in number with small ticket size — but a **Supreme Court decision excluded the telecom consumers from the purview of the Act.**
- ✎ At the same time, **TRAI Act 1997 does not entail handling of individual consumer complaints by the regulator** and all complaints received by it are forwarded to concerned telecom operators for suitable action.

Source: The Hindu, Economic Times

Manipur CM launches Chief Minister-gi Hakshelgi Tengbang (CMHT)

Why in news?

Manipur Government has launched the Chief Minister-gi Hakshelgi Tengbang (CMHT), a health assurance scheme for the poor and disabled people.

About the Chief Minister-gi Hakshelgi Tengbang (CMHT) Scheme:

- ◆ The CMHT scheme will provide cashless treatment to poor at government hospitals, health centres and other empanelled selected private hospitals.
- ◆ The scheme will provide insurance cover up to Rs 2 lakh per eligible family in treatment of seven critical identified critical ailments – cardiovascular diseases, neurological conditions, kidney ailments, liver ailments, cancer, neo-natal diseases and burns per year.
- ◆ The beneficiaries will be identified from Socio Economic Caste Census (SECC).
- ◆ They may get themselves enrolled for scheme with help of ASHA workers at kiosks opened in nearby PHCs, CHCs and District Hospitals.

Significance of the scheme:

- ✎ The CMHT Scheme will have convergence with Government of India programme like PMs Jana Aushadhi Programme and Free Diagnostic Programme.
- ✎ It will be truly IT platform driven scheme. Along with Chief Minister-gi Sotharabashing gi Tengbang (CMST) scheme, state government is able to provide two most noble social security schemes to its people.

Source: The Hindu, Business Standard

Nodal agency to fight malnutrition**Why in news?**

Aiming to eradicate malnutrition among children, Congress MP Jyotiraditya Scindia has introduced a Private Member Bill(**Child Nutrition and Development Nodal Agency Bill, 2017**) in the Parliament. The bill proposes setting up a nodal agency for child nutrition and development.

What is Private member's bill?

- ◆ Members of Parliament other than ministers are called private members and bills presented by them are known as Private member's bills.
- ◆ Private members may belong to the party in power or the Opposition.

Need for a nodal agency:

- ◆ Despite thousands of crores of rupees being spent and a number of government schemes working for child development, the status of health and nutrition of children in the country remains abysmal.
- ◆ All nutrition-specific and nutrition-sensitive schemes work in silos. As a result, they are not able to achieve the intended outcome.
- ◆ Therefore, the establishment of a nodal agency that would facilitate coordination of all ministries and departments and execute the schemes in a convergent manner is urgently required.

Its Function:

- ✎ The body would facilitate and supervise multi-sectoral programme in high, medium- and low-burdened districts with malnourished children.
- ✎ It would coordinate and administer policy implementation among various ministries responsible for implementing programmes aimed at eradicating malnutrition.
- ✎ At the end of each financial year, the agency will submit a report of its activities to the Central government.

Way ahead:

The need of the hour is to involve all field functionaries in a productive manner. Consistent monitoring and evaluation of the schemes using technological interventions and real-time data is also important. There is also a need to provide leverage budgets from related departments to develop an integrated plan with cross-sectoral collaboration to achieve nutrition-related targets.

Source: The Hindu



International Relations, Indian & The World and International Affairs

Raisina Dialogue 2018

Why in news?

Israel's Prime Minister, Mr Benjamin Netanyahu, inaugurated the third edition of the Raisina Dialogue held recently in New Delhi.

- ◆ The theme of the Dialogue this year is '**Managing Disruptive Transitions: Ideas, Institutions & Idioms**'.

About the Raisina Dialogue:

The Raisina Dialogue is **an annual flagship conference on Geopolitics and Geo-economics**.

- ✎ The conference is **organised by Ministry of External Affairs and Observer Research Foundation (ORF)**.
- ✎ The name of conference comes from Raisina Hill which is the elevation in New Delhi where presidential palace of India, Rashtrapati Bhavan is located.
- ✎ It is designed to explore prospects and opportunities for Asian integration as well as Asia's integration with the larger world.
- ✎ It is predicated on India's vital role in the Indian Ocean Region and how India along with its partners can build a stable regional and world order.
- ✎ The first edition of the conference was held in March 2016 with the theme "Asia: Regional and Global Connectivity". It is organized on the lines of the Shangri-La Dialogue held in Singapore.
- ✎ The second edition of conference was held in January 2017 with the theme "**The New Normal: Multilateralism in a multipolar world**".

Participants:

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

Significance:

- ☑ The Raisina Dialogue is India's attempt to reclaim its role as the hub of knowledge and ideas, as during the times of Nalanda, in the 21st century.
- ☑ The Raisina Dialogue was born two years ago, in 2016, in the belief that the Asian century that the world was talking about was not about any exclusive geographical region.
- ☑ It has today become a crucible for conversations and ideas that while located in India can be owned by the world.

Source: PIB, Business Standard

India, ASEAN sign Delhi Declaration

Why in news?

The ASEAN-India Commemorative Summit was held in New Delhi recently to celebrate the 25th anniversary of the establishment of sectoral dialogue between two sides under the theme of **“Shared Values, Common Destiny”**.

- ◆ During this summit, Delhi declaration was adopted.

Highlights of Delhi Declaration:

- ✍ In a statement called the **“Delhi Declaration”**, the leaders decided to increase commitment and “promote comprehensive approach to combat terrorism” through disruption of militant activities.
- ✍ Leaders of the ASEAN and India also decided to increase cooperation in combating other transnational crimes such as human trafficking, illicit drug trafficking, cyber crime and piracy.
- ✍ The two entities agreed to ensure compliance with United Nations Security Council resolutions on counter-terrorism, and to note the efforts made towards the formation of the Comprehensive Convention on International Terrorism.
- ✍ Leaders of the two entities decided to strengthen ASEAN-India economic relations by effectively implementing the ASEAN-India Free Trade Area, and intensifying efforts towards creating a Regional Comprehensive Economic Partnership (RCEP) in the region.
- ✍ ASEAN and India also agreed to cooperate for the conservation of marine resources, in the aviation and maritime transport sectors, promote growth of Micro, Small and Medium Enterprises, deepen relations in science and technological exchange, implement an ASEAN-India Space Cooperation Programme, and encourage private sector investment.
- ✍ The Delhi Declaration called for the early completion of the India-Myanmar-Thailand Trilateral Highway Project. It said that the trilateral highway should then be extended to Cambodia, Laos and Vietnam.

About ASEAN:

- ☑ The Association of Southeast Asian Nations or ASEAN is regional intergovernmental organisation comprising ten Southeast Asian countries.
- ☑ It was established on August 8, 1967 through ASEAN declaration (also known as Bangkok Declaration). Its secretariat is located in Jakarta, Indonesia.
- ☑ ASEAN promotes Pan-Asianism and intergovernmental cooperation and facilitates economic, political, security, military, educational and socio-cultural integration amongst its members and other Asian countries.
- ☑ It consists of 10-member countries- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

Source: PIB, The Hindu

China reveals ‘Polar Silk Road’ ambition in Arctic policy white paper

Why in news?

China released its first official Arctic policy white paper, outlining its ambition for a “Polar Silk Road” amid growing concerns over China’s activities in the region.

As per the policy, specifically, China will mainly focus its attention on four aspects:

- ◆ First, China will participate in the development of Arctic shipping routes which are composed of the Northeast Passage, Northwest Passage, and the Central Passage. Noting that “the Arctic shipping routes are likely to become important transport routes for international trade” as a result of global warming, China plans to build a “Polar Silk Road” by developing the Arctic

shipping routes. To that end, China will encourage its enterprises to participate in the infrastructure construction for these routes and conduct commercial trial voyages.

- ◆ Second, China aims to participate “in the exploration for and exploitation of oil, gas, mineral and other non-living resources” in the Arctic. However, the white paper also places a particular emphasis on nontraditional energy sources.
- ◆ Third, China will start to utilize fisheries and other living resources and participate in conservation, since “the Arctic has the potential to become a new fishing ground in the future.” In recent years, Chinese fishermen have been sailing farther and farther abroad in search of fertile fishing grounds; including, unfortunately, illegal fishing.
- ◆ Fourth, China will develop Arctic tourism, which the paper described as “an emerging industry.” China will support and encourage “its enterprises to cooperate with Arctic States in developing tourism in the region” and conduct “training for and regulates Chinese tourism agencies and professionals involved in Arctic tourism.”

Concerns:

Although Beijing maintained that China’s Arctic policy is based on the principle of “respect, cooperation, win-win results and sustainability,” some analysts have raised concerns over China’s increasing prominence in the region.

Way Ahead

China is an important stakeholder in Arctic affairs. Geographically, China is a ‘Near-Arctic State’, one of the continental States that are closest to the Arctic Circle. The natural conditions of the Arctic and their changes have a direct impact on China’s climate system and ecological environment, and, in turn, on its economic interests in agriculture, forestry, fishery, marine industry and other sectors.

The land territories in the Arctic cover an area of about 8 million square kilometres, whose sovereignty belongs to Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the US. The Arctic Ocean has an area of over 12 million square kilometres, in which coastal and other countries share maritime rights and interests according to international law.

Source: The Hindu

Government stops free conversion of PIO cards to OCI

Why in news?

The Union government has stopped the scheme of free conversion of Person of Indian Origin (PIO) cards to Overseas Citizen of India (OCI) cards.

- ◆ The government has decided not to give any more extension beyond the December 31 deadline.
- ◆ However, the conversion would continue beyond the date on payment of fees.

Why there is a scheme of merger?

- ✍ Simultaneous existence of PIO and OCI cards led to confusion among People of Indian Origin residing abroad. Thus, merging PIO and OCI will lead to simplification of the rules under a single umbrella.
- ✍ It would facilitate visa-free travel to India, rights of residency and participation in business and educational activities in the country.
- ✍ This is aimed at simplifying the visa-free entry for people of Indian origin into India.
- ✍ The merger of the two cards could make PIO cardholders eligible for benefits already enjoyed by OCI cardholders.
- ✍ Merging of the two cards will also facilitate travel of Indians staying abroad and their participation in various activities in India.

Who are NRIs, PIO and OCI?

- ☑ Non-Resident Indians (NRI), Person of Indian Origin (PIO) and Overseas Citizen of India (OCI) are the three major categories in which the people from India go and live abroad can be categorized.
- ☑ While NRIs is essentially a term used for Indians that live in another country, PIOs and OCIs are people who want to stay connected and involved with India more closely.

Benefits of being an NRI:

- ☑ Can get special bank accounts from Indian banks.
- ☑ Can continue to own land and property in India.
- ☑ Earnings outside India are not taxed by the Indian government, provided you have paid taxes in the nation you reside in. Local earnings in India (interest, rental income) are still taxed.
- ☑ There is a special quota of seats in Indian universities reserved for NRIs.
- ☑ Can still vote, but you have to be in India to do it.

Drawbacks of an NRI card holder:

- ☑ May need permission to take out money invested in India.
- ☑ May not purchase agricultural land or farm houses.
- ☑ May not hold a government job.
- ☑ May not be elected to a political position.

Benefits of being an OCI

- ☑ Lifelong multiple entry visa to India
- ☑ Never have to report to the FRRO regardless of the length of your stay
- ☑ Can eventually become a citizen of India if you remain an OCI for 5 years and live in India for at least 1 year (short breaks are now allowed)
- ☑ Can use special counters during immigration
- ☑ Don't need a student visa to study in India
- ☑ Don't need an employment visa to get a job
- ☑ Can open a special bank account in India, just like an NRI
- ☑ Can make investments in India
- ☑ Can buy non-farm property and exercise property ownership rights
- ☑ Can use your OCI card to apply for a driver's license, open a bank account, or get a PAN card
- ☑ Get the same economic, financial, and education benefits as NRIs (e.g. reserved admission quotas), and you can adopt children like an NRI
- ☑ Pay the Indian resident fee when visiting a national parks, monuments, museums or wildlife sanctuary (of course it is ultimately up to the discretion of the man issuing tickets)

Drawbacks of an OCI card holder:

- ☑ May not purchase agricultural land or farm houses
- ☑ May not vote
- ☑ May not hold a government job
- ☑ May not be elected to a political position
- ☑ May not travel to restricted areas without permission

Benefits of being a PIO card holder:

- ☑ If a person holds a PIO card, then he/she doesn't need a separate visa to visit India. The card is valid for 15 years. Along with this, he/she is exempted from a student or employment visa to acquire employment or academic opportunities in India.
- ☑ A PIO card holder during the duration of stay in India, is not required to register at the Foreigner Regional Registration Office (FRRO).
- ☑ Not only this, but the holder also enjoys parity with NRIs in concern to economic, financial and educational matters. These may include matters related to property transfer or acquisition, holding, disposal, investment, admission of children in educational institutions under general category quota for NRIs.
- ☑ A separate immigration counters are provided at all International airports in India for PIO card holders.

Drawbacks for PIO card holder:

- ☑ The PIO card holders do not have any voting rights.
- ☑ Meanwhile, a prior permission is needed to undertake mountaineering expeditions or any such related research work in protected areas.

Source: The Hindu, Indian Express

India and Pakistan extend Thar Rail Link for three more years

Why in news?

India and Pakistan have recently decided to extend the Thar Link Express/Thar Express.

- ◆ The train will now continue to connect both nations till January 31, 2021.

About Thar Link Express/Thar Express:

- ✎ Thar Express connects Khokhrapar in Pakistan and Munabao in Rajasthan.
- ✎ The rail link facilitates people-to-people contacts which Pakistan believes are essential for improving relations between both the countries.
- ✎ The weekly train connects Jodhpur and the bordering region of Rajasthan with the province of Sindh in Pakistan.

Background:

The agreement to run the Thar Link Express was signed in 2006 and is one of the cheapest means of transport between the two rival countries.

Source: The Hindu

India, Cambodia decide to boost defence ties; ink 4 pacts

Why in news?

India and Cambodia have signed four agreements to enhance cooperation on security, connectivity and development assistance while stressing the importance of adhering to the law of the sea.

Key Facts:

- ◆ Besides, a line of credit from India to fund **Cambodia's Stung Sva Hab water resources development project** for USD 36.92 million has also been signed.
- ◆ Significantly, Cambodia, which is very close to China, endorsed the importance of the UN Convention on the Law of the Sea (UNCLOS) in a joint statement with India.

Background:

- ✎ India- Cambodia relations go back to the 1st century AD when Hindu and Buddhist religious and cultural influences emanated out of India to various parts of Southeast Asia.

- ✎ Cambodians are predominantly Buddhist but retain a strong influence of Hindu rituals, idolatry and mythology.

Location of Cambodia:

- ☑ Cambodia is a country located in the southern portion of the Indochina Peninsula in Southeast Asia.
- ☑ It is bordered by Thailand to the northwest, Laos to the northeast, and Vietnam to the east, and the Gulf of Thailand to the southwest.

Source: Indian Express

India emerges as 6th wealthiest country in 2017: New World Wealth

Why in news?

According to a report by New World Wealth, India has been ranked sixth in the list of wealthiest countries with total wealth of \$8,230 billion.

Definition of total wealth:

- ◆ Total wealth refers to the private wealth held by all the individuals living in each country/city. It includes all their assets (property, cash, equities, business interests) less any liabilities.

The report, however, **excludes government funds from its figures.**

Who are High net-worth individuals?

- ◆ High net-worth individuals are those with \$1 million or more in net assets.

Highlights of the report:

- ✎ As per the report, the US is the wealthiest country with total wealth of \$64,584 billion, followed by China (\$24,803 billion) and Japan (\$19,522 billion).
- ✎ Others in the list include United Kingdom (4th, \$9,919 billion), Germany (5th, \$9,660 billion), France (7th, \$6,649 billion), Canada (8th, \$6,393 billion), Australia (9th, \$6,142 billion) and Italy (10th, \$4,276 billion).
- ✎ India was the best performing wealth market globally in 2017 as its total wealth rose 25% from \$6,584 billion in 2016 to \$8,230 billion in 2017.
- ✎ Over the past decade (2007-2017), India's total wealth increased from \$3,165 billion in 2007 to \$8,230 billion in 2017, a jump of 160%.
- ✎ The report further noted that India, is home to 330,400 HNWI's (high net-worth individuals), ranking it ninth in this aspect. The US topped the list with 5,047,400 HNWI's.
- ✎ India is also home to 20,730 multimillionaires, the seventh largest in the world.
- ✎ India has 119 billionaires, the third-highest after the US and China.

Source: Live Mint

AAI, Lao PDR sign civil aviation cooperation agreement

Why in news?

India and Lao PDR have signed civil aviation cooperation agreement for providing SkyRev360, a comprehensive e-data gathering, invoicing and collection system.

- ◆ The agreement was signed between Airports Authority of India (AAI) and Lao Air Traffic Management, Department of Civil Aviation.

About SkyRev360:

- ✎ SkyRev360 is fully automated and comprehensive data gathering invoicing and collection service system.

- ✎ It has been developed by AAI in collaboration with International Air Transport Association (IATA) under the Government's Make in India initiative.
- ✎ It was launched in February 2017 by AAI.

What it does?

- ☑ It helps to eliminate inaccuracies errors and delays for better revenue management with less manual processing.
- ☑ It helps airport operators world-wide in avoiding revenue leakages, reducing redundancies, disputes and easy integration with all external systems.
- ☑ The solution gathers 100% of your flight data and produces comprehensive billing data. Therefore, with SkyRev360, ANSPs' financial operations become both more accurate and efficient in one stroke.
- ☑ It also helps in curtailing the debt collection period to the minimum.

Key Features:

Data gathering and processing module:

- ☑ It can ensure essential data of invoices latest and most complete.

Invoicing module:

- ☑ It maintains all account attributes and allows for extensive view of associated data, including aircraft specifications, flight movements, billing ledger records, etc.

Collection:

- ☑ It's all data collections are managed with IATA Enhancement & Financing Services (E&F) process, which offers efficiencies and automation to air navigation service providers (ANSPs) and airlines by settling through IATA Settlement Systems.

Airline queries:

- ☑ All queries and disputes related to billing and collection from your air operators are handled by IATA team.

Dashboard and reports:

- ☑ It continuously reports incidents, airspace usage, traffic volumes, economic values etc.

Source: The Hindu

ASEAN pushes India to conclude RCEP this year

Why in news?

Mounting pressure on New Delhi to give an early consent to the Regional Comprehensive Economic Partnership — a mega regional trade pact being negotiated by sixteen nations — the 10-member ASEAN expressed hope that India would not let the bloc down in its efforts to conclude the agreement this year.

- ◆ India has, however, refused to take responsibility for the long-winding negotiations and has stressed that it is important to address the sensitivities and aspirations of all participants.

About RCEP:

The Regional Comprehensive Economic Partnership (RCEP) agreement (FTA) is proposed between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam) and the six states with which ASEAN has existing FTAs (Australia, China, India, Japan, South Korea and New Zealand).

- ◆ RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.

- ◆ The Regional Comprehensive Economic Partnership (RCEP) is among the proposed three mega FTAs in the world so far. The other two is:
 1. The TPP (Trans Pacific Partnership, led by the US) and
 2. The TTIP (Trans-Atlantic Trade and Investment Partnership between the US and the EU).
- ◆ RCEP is viewed as an alternative to the TPP trade agreement, which includes the United States but excludes China.

India's concerns associated with RCEP:

India is not comfortable with the ambitious dismantling of import tariffs being pushed for by the ASEAN, especially as it would also mean allowing duty-free access to Chinese goods.

- ✎ The Indian industry does not want the country to commit to high levels of liberalisation as it fears that it could get out-priced in the domestic market.
- ✎ India has also stressed on the need for other RCEP members to deliver in the area of services to arrive at an agreement. So far proposals in the area of services, including on work-visas for movement of professionals, have been disappointing with no member ready to make meaningful contributions.
- ✎ Emphasis of RCEP is on trade in goods and the same enthusiasm is not shared for trade in services. The reluctance in giving market access for trade in services is a big challenge for India.
- ✎ While there is immense pressure on India in the RCEP negotiations to commit to opening up (90%) of its traded goods, what is troubling the government is the fact that other RCEP countries have so far been lukewarm to India's demands for greater market access in services, particularly on easing norms on the movement of professionals and skilled workers across borders for short-term work.
- ✎ India, which is defensive regarding opening up its goods sector, is currently virtually isolated in the RCEP talks. Also, existing huge goods trade deficit has led to questions on whether the pact is only helping ASEAN nations and not benefiting India.
- ✎ Significantly, while the India-ASEAN Trade in Goods Agreement was inked and enforced from January 1, 2010, India's goods trade deficit with ASEAN widened from \$4.98 billion in 2010-11 to \$14.75 billion in 2015-16, and then narrowed to \$9.56 billion in 2016-17. The huge goods trade deficit has led to questions on whether the pact is only helping ASEAN nations and not benefiting India.

Source: The Hindu

India admitted to Australia Group

Why in news?

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

What is Australia Group?

- ✎ Australia Group is multilateral export control regime (MECR) and informal group.
- ✎ It works to counter spread of materials, equipment and technologies that could contribute to development or acquisition of chemical and biological weapons (CBW) by states or terrorist groups through harmonization of export controls.
- ✎ It was established in 1985.
- ✎ Coordination among participant countries of Australia Group helps them to fulfil their obligations under Chemical Weapons Convention and the Biological and Toxin Weapons Convention to the fullest extent possible.

Members of Australia Group:

- ✎ It has now 43 members. It is important to note that China, Pakistan, Iran, North Korea are not its members.

Significance of India's membership:

- ☑ The inclusion will help to raise India's stature in the field of non-proliferation, though it is not signatory to Non-Proliferation Treaty (NPT) and help in acquiring critical technologies.
- ☑ India is first South Asian nation to become its full-time member of Australia Group.
- ☑ It is also expected to strengthen India's bid to enter 48-member Nuclear Suppliers Group (NSG).
- ☑ With its admission into Australia Group, India is now part of three of the four key export control groups in world dealing with non-proliferation.
- ☑ India's entry into three of four export control regimes burnishes its credentials i.e. a reference to country's position that it has scrupulously adhered to rules governing non-proliferation of sensitive technologies and equipment.

Apart from Australia Group, another two key export control groups of which India has memberships:

Missile Technology Control Regime (MTCR):

- ☑ India had joined MTCR in June 2016.
- ☑ Missile Technology Control Regime (MTCR) is an informal and voluntary partnership among 35 countries that regulates trade in sensitive equipment and technologies to ensure there is no proliferation of missile and unmanned aerial vehicle technology capable of carrying payloads above 500kg for more than 300km.

Wassenaar Arrangement:

- ☑ India had joined Wassenaar Arrangement, which is also an informal grouping of 42 countries, exercising control over the export of dual-use goods and technologies in December 2017.

The fourth one of which India has not have membership:**Nuclear Suppliers Group (NSG):**

- ☑ The only export control group that India is not a part of is the elite Nuclear Suppliers Group (NSG).
- ☑ NSG controls the export of sensitive nuclear technologies and equipment, with the aim of preventing nuclear weapons' proliferation is only export control group.
- ☑ China has repeatedly blocking India's entry in NSG. Significantly, China is not member of Wassenaar Arrangement, MTCR and Australia Group.

Source: The Hindu, Economic Times

India Ranks 81st On Global Talent Competitiveness Index

Why in news?

India was ranked 81st among 118 countries in Global index of talent competitiveness (GTI) list.

- ◆ India has improved its position from 92nd last year.
- ◆ With this fifth edition, GTCI addresses the theme of Diversity for Competitiveness.

About the index:

- ✎ Launched for the first time in 2013, the Global Talent Competitiveness Index (GTCI) is an annual benchmarking report that measures the ability of countries to compete for talent.
- ✎ The index is produced by global business school INSEAD in partnership with Adecco Group and Tata Communications.

- ✎ The index measures ability of countries to compete for talent i.e. how countries grow, attract and retain talent.

Highlights of the report:

- ✎ Switzerland has topped the list. It is followed by Singapore and the US. European countries dominate the top ranks, with 15 out of the top 25 places.
- ✎ Among the five BRICS countries China is at 43rd, Russia 53rd, South Africa 63rd and Brazil 73rd.
- ✎ India has moved up to the 81st position, but remains a laggard among the BRICS nations. India was at the 92nd position last year and at the 89th place in 2016.

Note for India:

- ☑ India faces serious risk of worsening brain drain. In terms of formal Education, India ranks 67th and in Lifelong Learning it ranks 37th. In terms of pool of Global Knowledge Skills (63rd) is solid compared with other emerging markets.
- ☑ India also has plenty of room for improvement is in minimising brain drain while achieving brain gain by luring back some of its talented diaspora members as it ranks 98th in the Attract pillar and in retaining its own talent it ranks 99th.

Source: The Hindu

India's richest 1% corner 73% of wealth generation: Oxfam Survey

Why in news?

The international rights group Oxfam has recently released a report titled 'Reward Work, Not Wealth'

- ◆ The report reveals how the global economy enables wealthy elite to accumulate vast wealth even as hundreds of millions of people struggle to survive on poverty pay.

Highlights of the report:

- ✎ Globally 82% of wealth generated in 2017 worldwide went to 1%, while 3.7 billion people that account for poorest half of population saw no increase in their wealth.
- ✎ Year 2017 saw unprecedented increase in number of billionaires, at rate of one every two days.
- ✎ Billionaire wealth has risen by average of 13% year since 2010. It was six times faster than the wages of ordinary workers, which have risen by a yearly average of just 2%.
- ✎ Women workers often find themselves at bottom of the heap and nine out of 10 billionaires are men.
- ✎ In India, 67 crore population comprising the population's poorest half saw their wealth rise by just 1%.
- ✎ Wealth of India's richest 1% increased by over Rs 20.9 lakh crore, an amount equivalent to total budget of central government in 2017-18.
- ✎ India's top 10% of population holds 73% of the wealth and 37% of India's billionaires have inherited family wealth. They control 51% of the total wealth of billionaires in the country. There are only four women billionaires in India and three of them inherited family wealth.
- ✎ The report reveals that the top 1% is evading an estimated \$200bn in tax. More significantly, developing countries are losing at least \$170 billion each year in foregone tax revenues from corporations and the super-rich.

Implications of growing divide:

- ☑ The billionaire boom is not a sign of a thriving economy but a symptom of a failing economic system.

- ☑ Those working hard, growing food for the country, building infrastructure, working in factories are struggling to fund their child's education, buy medicines for family members and manage two meals a day.
- ☑ The growing divide undermines democracy and promotes corruption and cronyism.

Recommendations made by the report:

Oxfam makes several recommendations to start fixing the problem of income inequality.

For governments:

- ☑ On the government's part, it has asked for things like promoting inclusive growth by encouraging labour-intensive sectors that will create more jobs, imposing higher tax on the super-rich, implementing policies to tackle all forms of gender discrimination and sealing the "leaking wealth bucket" by taking stringent measures against tax evasion.
- ☑ The report has urged Indian government to ensure that country's economy works for everyone and not just the fortunate few.
- ☑ It asked government to promote inclusive growth by encouraging labour-intensive sectors that will create more jobs; effectively implementing the social protection schemes and investing in agriculture.

For corporations

- ☑ The recommendations for corporations are far more eyebrow-raising, be it "Limit returns to shareholders and promote a pay ratio for companies' top executives that is no more than 20 times their median employees' pay" or refraining from rewarding shareholders through dividends or buybacks or even paying bonuses to executives until "all their employees have received a living wage".

Way ahead:

- ☑ The survey found that, in India, it will take 941 years for a minimum wage worker in rural India to earn what the top paid executive at a leading Indian garment firm earns in a year. In the US, it takes slightly over one working day for a CEO to earn what an ordinary worker makes in a year.
- ☑ Therefore, the survey stressed that the gap between the rich and the poor needs to be urgently addressed.

Source: The Hindu, Economic Times

Inclusive Development Index

Why in news?

World Economic Forum (WEF) has recently released an Inclusive Development Index.

About Inclusive Development Index (IDI)

- ◆ IDI measures progress of 103 economies on three individual pillars – growth and development; inclusion; and inter-generational equity. It has been divided into two parts.
- ◆ The first part covers 29 advanced economies and second 74 emerging economies.
- ◆ The index takes into account the living standards, environmental sustainability and protection of future generations from further indebtedness.
- ◆ The index also has classified countries into five sub-categories in terms of five-year trend of their overall Inclusive Development Growth score — receding, slowly receding, stable, slowly advancing and advancing.

Highlights of Inclusive Development Index (IDI)-2018

- ✎ Norway was again remained world's most inclusive advanced economy. Among advanced economies, Norway is followed by Ireland, Luxembourg, Switzerland and Denmark in the top five.

- ✎ Lithuania again topped list of emerging economies. Lithuania is followed by Hungary, Azerbaijan, Latvia and Poland.
- ✎ Among BRICS economies, Russia was ranked at 19th, followed by China (26), Brazil (37), India (62) and South Africa (69).
- ✎ India was ranked at 62nd place among emerging economies on Inclusive Development Index (IDI-2018) released by World Economic Forum (WEF).
- ✎ India's position is much below China (26th) and Pakistan (47th). It was ranked 60th among 79 developing economies in IDI-2017.
- ✎ India was among ten emerging economies with 'advancing' trend, despite its low overall score. Of three pillars that make up index, India was ranked 72nd for inclusion, 66th for growth and development and 44th for inter-generational equity.

Concerns raised by the report:

- ☑ The study found that decades of prioritizing economic growth over social equity has led to historically high levels of wealth and income inequality and caused governments to miss out on a virtuous circle in which growth is strengthened by being shared more widely and generated without unduly straining the environment or burdening future generations.
- ☑ Excessive reliance by economists and policy-makers on Gross Domestic Product as the primary metric of national economic performance is part of the problem. The GDP measures current production of goods and services rather than the extent to which it contributes to broad socio-economic progress as manifested in median household income, employment opportunity, economic security and quality of life.

Way ahead:

- ☑ Rich and poor countries alike are struggling to protect future generations, as it cautioned political and business leaders against expecting higher growth to be panacea for social frustrations, including those of younger generations who have shaken politics of many countries in recent years.
- ☑ It has also urged the leaders to urgently move to a new model of inclusive growth and development, saying reliance on GDP as a measure of economic achievement is fuelling short-termism and inequality.

Source: The Hindu

10th Global Forum for Food & Agriculture

Why in news?

The 10th edition of Global Forum for Food & Agriculture was held in Berlin, Germany from 18th - 20th January 2018.

Key Facts

- ◆ The theme of this year's event is "Shaping the future of livestock – sustainably, responsibly, efficiently".
- ◆ The event also included 10th Berlin Agriculture Ministers' Conference.
- ◆ The discussions during the conference focused on sustainable and productive animal production among other issues.

Global Forum for Food and Agriculture (GFFA)

The GFFA is international conference that focuses on central questions concerning future of global agri-food industry.

- ✎ It is world's largest conference of agriculture ministers.
- ✎ It is held during International Green Week (IGW).

- ✎ It provides common platform to representatives from worlds of politics, business, science and civil society opportunity to share ideas and enhance understanding on selected topic of current agricultural policy.

About International Green Week (IGW):

- ☑ The International Green Week (IGW) is a **one-of-a-kind international exhibition of the food, agriculture and gardening industries.**
- ☑ IGW was established in 1926.
- ☑ IGW is an important international trade fair held annually in Berlin, Germany.
- ☑ Ever since, food producers from all over the world have utilized the IGW to introduce new products, to test market food and establish brand identities.
- ☑ The International Green Week in Berlin is considered the world's biggest consumer fair for the food, agricultural, and horticultural industries.

Source: PIB

BBIN Motor Vehicles Agreement regains momentum

Why in news?

Bangladesh, India and Nepal have given nod to operating procedures for movement of passenger vehicles in the sub-region under Bangladesh-Bhutan-India-Nepal (BBIN) motor vehicles agreement.

- ◆ These countries will soon complete the internal approval processes for signing of the **passenger protocol.**

About Passenger protocol:

- ✎ The passenger protocol agreed upon is document detailing procedures for cross-border movement of buses and private vehicles for transport facilitation in sub region.
- ✎ It will be signed by three countries after completing necessary internal approval processes in their government.
- ✎ The delegations participating countries also agreed to continue to conduct trial movement of cargo vehicles along scheduled routes from April 2018 onwards, before finalizing protocol for cargo vehicular movement.

Background:

- ✎ India proposed a SAARC Motor Vehicle Agreement during the SAARC Summit in Kathmandu in November 2014.
- ✎ Due to objections from Pakistan, an agreement could not be reached. India instead pursued a similar motor vehicle agreement with the BBIN. The Bangladesh-Bhutan-India-Nepal Motor Vehicles Agreement was signed on 15 June 2015.
- ✎ Bhutan has not yet ratified the pact for its entry to come into force. However, Bhutan has given its consent for the BBIN MVA to enter into force amongst the other 3 countries i.e. Bangladesh, India and Nepal, who have already ratified it.

About BBIN Motor Vehicles Agreement (MVA):

The landmark MVA was signed by Transport Ministers of BBIN countries (Bangladesh, Bhutan, India and Nepal) in Thimphu, Bhutan in June 2015.

Objective of the agreement:

- ☑ The main objective of the agreement is to provide seamless people-to-people contact and enhance economic interaction by facilitating cross border movement of people and goods.

Key features of the agreement:

- ☑ As per the agreement, member countries would allow vehicles registered in the other countries to enter their territory under certain terms and conditions.
- ☑ Customs and tariffs will be decided by the respective countries and these would be finalized at bilateral and trilateral forums.
- ☑ The agreement will permit member states to ply their vehicles in each other's territory for transportation of cargo and passengers, including third country transport and personal vehicles.

Significance of the agreement:

- ☑ The BBIN agreement will promote safe, economical efficient and environmentally sound road transport in the sub-region and will further help each country in creating an institutional mechanism for regional integration.
- ☑ The agreement would permit unhindered movement of passenger and cargo vehicles among the four countries. Cargo vehicles do not have to be changed at the border, a practice that has prevailed until now.

Assistance from ADB:

- ☑ The Asian Development Bank (ADB) is providing technical, advisory, and financial support to BBIN MVA initiative as part of its assistance to South Asia Subregional Economic Cooperation (SASEC) program.

Background:

- ☑ Earlier trail runs for cargo vehicles under MVA were conducted along Kolkata-Dhaka-Agartala and Delhi-Kolkata-Dhaka routes which had successfully establishes their economic benefits.

About SASEC Programme:

In 2001, Bangladesh, Bhutan, India, and Nepal formed the South Asia Sub-Regional Economic Cooperation (SASEC) programme, which the Maldives and Sri Lanka joined in 2014.

- ✎ Under SASEC programme, these countries have worked together to build power plants, highways, rail systems and fiber optic networks to expand and improve Internet access.
- ✎ It is a project-based partnership to promote regional prosperity by
 1. Improving cross-border connectivity,
 2. Boosting trade among member countries, and
 3. Strengthening regional economic cooperation.
- ✎ The Asian Development Bank (ADB) is the secretariat and lead financier of the SASEC programme.

Source: PIB, Live Mint

India's NKN, Sri Lanka's LEARN connect with high capacity Net

Why in news?

India and Sri Lanka signed four agreements for collaboration in Information and communication technology (ICT) sector between both countries.

- ◆ The agreements were signed for collaboration in ICT sector and setting up of e-office system and connecting of National Knowledge network (NKN) for collaboration among universities and academics.

Significance of the move:

- ◆ With this, **Sri Lanka became first country to be connected to NKN through Gigabyte (GB) optical fibre network.**
- ◆ This will connect NKN to Lanka education & research network (LEARN) through which universities on both sides can share best practices and research ideas.

What is National Knowledge Network (NKN)?

NKN is a state-of-the-art Pan-India Gigabit network and is a revolutionary step towards creating a knowledge society without boundaries.

- ✎ NKN is also providing an ultra-high speed backbone for e-Governance and has links to multiple Global Networks.
- ✎ This project was launched in 2010 for period of 10 years. Currently, it is component of umbrella “Digital India” programme.

Purpose of NKN:

- ☑ The purpose of such a knowledge network goes to the very core of the country’s quest for building quality institutions with requisite research facilities and creating a pool of highly trained professionals.
- ☑ The NKN will enable scientists, researchers and students from different backgrounds and diverse geographies to work closely for advancing human development in critical and emerging areas.

Features of NKN:

NKN is designed as a Smart Ultra High Bandwidth network that seamlessly interconnects the leading Scientific and Technological institutions – which are pursuing world-class research and development.

Some of the salient features of the NKN are:

- ☑ Establishing Connectivity for Knowledge and information sharing.
- ☑ Enabling Collaborative Research in emerging areas such as Climate Modeling.
- ☑ Facilitating distance education in specialized fields such as medicine, emerging high tech areas covering info-bio-nano technology.
- ☑ Facilitating an ultra-high speed e-governance backbone for information sharing.

NKN will also act as a test bed for research in the area of network, security and delivery models for various services. The leading mission oriented agencies in the fields of nuclear, space and defence research are also part of NKN.

Services offered by NKN:

NKN network is designed with the aim of providing:

- ☑ Highest level of availability
- ☑ Robust & reliable connectivity
- ☑ Highest level of Scalability (specifically planned to match the unknown future demands which cannot be envisaged currently)
- ☑ Best Bandwidth Capacity: For NKN, various National Long Distance Carriers (NLDs) have provided 1Gbps / 2.5Gbps capacity links which can be self-healed. Further, the NLDs are in process of upgrading (using DWDM) to 10Gbps or more connectivity.

Source: The Hindu, Business Standard

Villagers along India-Myanmar international border to get passes

Why in news?

India and Myanmar are all set to streamline free movement of people within 16 km along their borders.

India-Myanmar international border:

- ◆ India and Myanmar share an unfenced border of 1,643 km, touching four states: Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km) and Mizoram (510 km).

What is the border pass?

- ✎ The Centre has asked the four states that share unfenced border with Myanmar to distribute “border pass” to all the residents living within 16 km from the boundary line.
- ✎ The border pass will be given only to the domiciles. All residents going across the border for agriculture, work or to meet relatives should carry the pass at all times. There will be no restrictions on their movement.
- ✎ The Centre has also asked the governments of Arunachal Pradesh, Nagaland, Manipur and Mizoram to enroll the border residents under Aadhaar on war footing.

Background:

- ✎ Both the countries had been intending to put a system in place after India raised the issue of movement of extremists and smugglers freely across the border.
- ✎ On January 3, the Union Cabinet has approved an agreement between India and Myanmar on land border crossing. The agreement is expected to enhance economic interaction between people of the two countries.

*Source: The Hindu***Nepal ends India’s monopoly on internet access with new Chinese link****Why in news?**

By opening a new optical fiber link across the Himalayan mountains to China, Nepal has ended India’s monopoly on internet access.

Key Facts:

- ◆ Nepal has started accessing internet from China after commercial operation of Nepal-China optical fiber link via Rasuwagadhi gateway across Himalayan Mountains became operational.
- ◆ The commercial operation of Chinese bandwidth project now ends Nepal’s sole dependence on India for internet bandwidth.

Previous scenario:

- ◆ Till recently, landlocked Nepal was totally dependent on India for access to the worldwide web through connections at Biratnagar, Bhairahawa and Birgunj, for which it pays a substantial sum as fees and royalties.
- ◆ Besides state-run Indian firms, Nepal has been acquiring bandwidth from private players such as Tata and Airtel and BSNL. This gave India complete monopoly in supplying internet to Himalayan nation.

Implications of the move:

- ◆ The opening of new line shows China’s growing engagement in a region seen as India’s backyard.
- ◆ It is also considered as milestone for developing internet infrastructure in Nepal and boost bilateral relations between both countries.
- ◆ It is considered as loss for India, both revenue wise and strategically.

Background:

- ✎ The internet was first introduced to Nepal in 1993 by a venture between the Royal Nepal Academy of Science and Technology (RONAST) and a private firm, the Mercantile Office Systems.
- ✎ The Indian Institute of Technology in Mumbai had a UNDP-funded internet connection and RONAST set up a system whereby it could connect to Mumbai to transfer email messages.
- ✎ The first optical fibre link to India was built four years later.

- ✎ Data use in Nepal has been increasing constantly with more people using social media platforms such as Facebook and Twitter and communication platforms such as Viber, Messenger, WhatsApp and WeChat, especially to communicate with family members abroad.
- ✎ In December 2016, state owned Nepal Telecom (NT) had signed Memorandum of Understanding (MoU) with China Telecom to acquire internet bandwidth. NT had begun test transmission of project from September 2017.

Source: The Hindu

Ministry of Road Transport & Highways signs MoU with Transport for London

Why in news?

The Ministry of Road Transport and Highways has recently signed an MoU with Transport for London (TFL).

- ◆ The MoU is aimed at using the expertise of TFL to revamp the public transport architecture in the country.

Significance of the MoU:

- ◆ The proposed MoU will help to revamp the public transport and augment passenger capacity by way of creating a sustainable public transport system.
- ◆ It will help in adopting best practices for policy reforms in the transport sector.
- ◆ It will also enable improved customer services, harness from scientific data analysis and implement effective IT systems in the transport sector.
- ◆ The MoU can see an increase the use of electric vehicles in public transport and promote digital transaction for ticketing.
- ◆ It can also help in improving major procurement strategies including PPP models for operations, infrastructure maintenance strategies, infrastructure design and delivery, besides promoting behavioral change towards promotion of public transport.

What is Transport for London (TFL)?

- ✎ TFL is the agency that manages the transport system for Greater London, and has demonstrated its capability by creating a strong and dependable public transport system in the city.

Why India should learn from London transport?

- ✎ TFL has created a unique system of operating buses in PPP model with over 17 operators under a single brand.
- ✎ A salient feature has been their double decker buses which provide for high capacity with low road space requirement.
- ✎ They have also been operating large number of electric and hybrid buses.
- ✎ The common mobility card is another successful product launched by TFL which has made travel easy for the commuters and accounting easier for the operators.
- ✎ As a result of creation of a successful public transport system in London, the city has not seen any increase in number of their private cars.

Source: PIB, The Hindu

India rejects US solar claim at WTO, explores new defence

Why in news?

India hit back at the United States' legal assault on its solar power policies at the World Trade Organisation.

- ◆ India rejected a US legal claim and said it was exploring new protection of India's own solar industry.

What is the issue?

- ✎ Since India enacted "**Domestic Content Requirements (DCR)**" under its **National Solar Mission (NSM)** in 2011, which requires solar power developers to use Indian-manufactured cells and modules, American solar exports to India have fallen by more than 90%.
- ✎ The US had, in 2014, filed the complaint before the global trade body alleging discrimination against American firms.
- ✎ In February 2016, the WTO panel found in favour of the US in a dispute challenging India's "localisation" rules discriminating against imported solar cells and modules under India's NSM.
- ✎ Last month, the United States had triggered a new round of litigation at the WTO, arguing that India had failed to abide by a ruling that it had illegally discriminated against foreign suppliers of solar cells and modules. However, India said it had changed its rules to conform with the ruling and that a US claim for punitive trade sanctions was groundless.

About the National Solar Mission:

- ✎ National Solar Mission, launched in 2010, aims to establish India as a global leader in solar energy by creating the policy conditions for its diffusion across the country as quickly as possible.
- ✎ The Mission has set the ambitious target of deploying 20,000 MW of grid connected solar power by 2022 and aims at reducing the cost of solar power generation in the country.

Source: The Hindu, Economic Times

Plan finally moving to overhaul H-1B visa program

Why in news?

The US is considering new regulations aimed at preventing the extension of H-1B visas, predominantly used by Indian IT professionals, as part of President Donald Trump's "Buy American, Hire American" initiative.

What is the proposal?

- ✎ The proposal intends to end the provision of granting extensions to H-1B visa holders whose applications for permanent residency (Green Card) had been accepted.
- ✎ The administration also plans to redefine high-specialty professionals for the purpose of H-1B visas.

Implications for India:

- ✎ A clampdown on H1B visas will make it tough for Indian IT majors to grow their US business.
- ✎ An estimated 500,000 to 750,000 Indian H-1B visa holders could be sent home if the administration decides to go ahead with the proposal which is aligned with President Donald Trump's "Buy American, Hire American" vision to boost manufacturing and protect local jobs for Americans.
- ✎ If implemented this could lead to large-scale deportations, mostly of Indians, throwing hundreds and thousands of families into crisis. The idea is to create a sort of 'self-deportation' of hundreds of thousands of Indian tech workers in the United States to open up those jobs for Americans.
- ✎ Indian IT companies will be forced to increase hiring of locals at the expense of Indians. It means there will be fewer job opportunities for Indian IT professionals especially on offshore locations.
- ✎ It will also raise operating costs and lower their forex earnings.
- ✎ At a larger scale, India continuously runs a large deficit in merchandise trade. This is largely funded through a surplus in services exports. Any event or measure that hits services exports will

have negative implications for the current account deficit and exchange rate besides economic growth.

- ✎ The employment in IT industry supports a large market for everything from housing to automobiles. Any slowdown in fresh hiring by IT companies or lower salary growth will hit consumption demand across sectors.

What is H-1B visa?

- ☑ The H1B visa is an employment-based, non-immigrant visa category for temporary workers given by the United States.
- ☑ For such a visa, an employer must offer a job and apply for your H1B visa petition with the US Immigration Department.
- ☑ The applicants must have at least a bachelor's degree, with a master's degree required for 20,000 of the 85,000 H-1B visas issued annually.
- ☑ This non-immigrant visa lets a firm employ foreigners for up to six years in positions for which they have been unable to find American employees.
- ☑ The H-1B visa holders can apply for permanent residency in the US and buy property in the country.
- ☑ An estimated 70% of these visas go to Indian citizens.
- ☑ However, the demand for these visas is three times higher, and H-1B visas are allocated by a lottery system.

Why does the US want to tighten the regulation for H1B visa?

The aim of the H1B visa programme was to supplement the US workforce with high-skilled workers to do jobs that Americans are not skilled to do, not to replace the US workers.

- ☑ But over time, there have been many grumblings that many companies use the H1B visa to replace American workers with foreign ones, as the latter can be hired at lower salaries without compromising on the skill sets.
- ☑ In some cases, American employees have alleged that they were made to train H1B holders to do their own jobs, and then fired.
- ☑ Many US legislators are of the opinion that H1B visa regime is taking away job opportunities from the Americans.
- ☑ Even President Donald Trump holds a very conservative view on the H-1B and other guest worker visa programmes.

Background:

- ☑ The United States grants 85,000 non-immigrant H-1B visa every year — 65,000 to foreigners hired abroad and 20,000 to foreigners enrolled in advanced degree courses in US schools and colleges.
- ☑ An estimated 70% of these visas go to Indians — hired mostly by American companies such as Facebook, Microsoft and Google and some by American arms of Indian tech giants Infosys, Wipro and TCS.

Source: The Hindu, Economic Times, Hindustan Times

China develops underwater surveillance networks in Indian Ocean, South China Sea

Why in news?

China has successfully developed new underwater surveillance network to help its submarines get stronger lock on targets while protecting nation's interests along maritime Silk Road, which also includes Indian Ocean.

- ◆ The project is part of unprecedented military expansion fuelled by China's desire to challenge United States in world's oceans.

About the Underwater surveillance network:

- ✎ The network is underwater surveillance system based on network of platforms — buoys, satellites, surface vessels and underwater gliders — that gather data from Western Pacific, South China Sea and Indian Oceans.
- ✎ The system works by gathering information about underwater environment, particularly water temperature and salinity, which navy can then use to more accurately track target vessels as well as improve navigation and positioning.
- ✎ The new surveillance system will enable Chinese submarines to steer a much safer course through difficult waters as well as improving their targeting ability.

Source: The Hindu

India sidelines Pakistan from a SAARC initiative

Why in news?

India has kicked off the process of appointing a telecom company that will connect and extend its state-of-the-art National Knowledge Network (NKN) to research and education networks in six SAARC (South Asian Association of Regional Cooperation) member states — Afghanistan, Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka.

- ◆ It is important to know that Pakistan is the only SAARC nation that has been left out of this initiative.

Why Pakistan out of the initiative?

- ✎ India has for long suspended official talks with Pakistan due to continuing terrorist attacks launched by groups from across the border and chill in the relations is now evident in sphere of research cooperation too.

What is National Knowledge Network (NKN)?

NKN is a state-of-the-art Pan-India Gigabit network and is a revolutionary step towards creating a knowledge society without boundaries.

- ✎ NKN is also providing an ultra-high speed backbone for e-Governance and has links to multiple Global Networks.

Purpose of NKN:

- ✎ The purpose of such a knowledge network goes to the very core of the country's quest for building quality institutions with requisite research facilities and creating a pool of highly trained professionals.
- ✎ The NKN will enable scientists, researchers and students from different backgrounds and diverse geographies to work closely for advancing human development in critical and emerging areas.

Features of NKN:

NKN is designed as a Smart Ultra High Bandwidth network that seamlessly interconnects the leading Scientific and Technological institutions – which are pursuing world-class research and development.

Some of the salient features of the NKN are:

- ✎ Establishing Connectivity for Knowledge and information sharing.
- ✎ Enabling Collaborative Research in emerging areas such as Climate Modeling.
- ✎ Facilitating distance education in specialized fields such as medicine, emerging high tech areas covering info-bio-nano technology.

- ✎ Facilitating an ultra-high speed e-governance backbone for information sharing.

NKN will also act as a test bed for research in the area of network, security and delivery models for various services. The leading mission oriented agencies in the fields of nuclear, space and defence research are also part of NKN.

Services offered by NKN:

NKN network is designed with the aim of providing:

- ✎ Highest level of availability
- ✎ Robust & reliable connectivity
- ✎ Highest level of Scalability (specifically planned to match the unknown future demands which cannot be envisaged currently)
- ✎ Best Bandwidth Capacity: For NKN, various National Long Distance Carriers (NLDs) have provided 1Gbps / 2.5Gbps capacity links which can be self-healed. Further, the NLDs are in process of upgrading (using DWDM) to 10Gbps or more connectivity.

Extension of NKN:

- ✎ India has now decided to extend the NKN to the global research and education networks in SAARC nations.
- ✎ NKN will be connected from Afghanistan to Delhi or Mumbai, from Bangladesh to Kolkata or Delhi, from Bhutan to Kolkata or Delhi, from Nepal to Kolkata or Delhi, from Maldives to Chennai or Mumbai and from Sri Lanka to Chennai or Mumbai.
- ✎ A state-of-the-art management centre and Network Operations Centre will also be set up to run the NKN network.
- ✎ The connection from Afghanistan, Maldives and Sri Lanka to India would be through a submarine cable for international connectivity.

Source: Economic Times

India, Pakistan exchange list of nuclear installations

Why in news?

India and Pakistan recently exchanged, through diplomatic channels simultaneously at New Delhi and Islamabad, the list of nuclear installations and facilities under a three-decade old bilateral pact.

- ◆ This is the 27th consecutive exchange of such list between two countries after first list was exchanged on 1 January 1992.

Background:

- ✎ The exchange is done each year on January 1, under the Agreement on the Prohibition of Attack against Nuclear Installations and Facilities, also referred to as the Non-Nuclear Aggression Agreement.

About Agreement on the Prohibition of Attack against Nuclear installations:

The Agreement on the Prohibition of Attack against Nuclear installations is a bilateral and nuclear weapons control treaty between the two South Asian states, India and Pakistan.

- ✎ The treaty aims at the reduction (or limitation) of nuclear arms and pledged not to attack or assist foreign powers to attack on each other's nuclear installations and facilities.
- ✎ The treaty was drafted in 1988, and signed by the Prime Minister Benazir Bhutto and her Indian counterparts, Rajiv Gandhi in 1988; it entered into force on January 1991.
- ✎ The treaty barred its signatories to carry out a surprise attack (or to assist foreign power to attack) on each other's nuclear installations and facilities.

- ✎ Starting in January 1992, India and Pakistan have annually exchanged lists of their respective civilian nuclear-related facilities.

Significance of the agreement:

- ✎ The need for the agreement had been felt against the backdrop of Israel's 1981 bombing of Iraq's Osirak reactor near Baghdad. The strike, carried out by Israeli fighter jets over hostile airspace, had set Iraq's nuclear weapons programme significantly.
- ✎ The agreement had also come at a time of deep anxiety for Pakistan. Islamabad had been rattled by the memory of the 1972 defeat which dismembered the country, and military developments in India, such as Operation Brasstacks in 1987, which was a war game exercise to prepare for deep strike offensive capabilities. Pakistan had at the time responded by putting at its nuclear installations and assets on 'high alert'.

Source: The Hindu

ASEAN India Pravasi Bharatiya Divas

Why in news?

Recently, the annual ASEAN India Pravasi Bharatiya Divas was celebrated at Singapore.

Key facts

- ◆ The conference, which was attended by top leaders and businessmen from Singapore and India, discussed the contribution of the Indian diaspora community in Southeast Asia.
- ◆ Theme: **"Ancient Route, New Journey: Diaspora in the Dynamic Asean-India Partnership."**

Aim:

- ◆ To highlight the "ancient human, maritime, cultural, commercial and religious links between India and Southeast Asia" and to promote greater economic, cultural and diplomatic cooperation between the two regions.

Significance of the event:

- ◆ The event coincides with the 25th anniversary of India-ASEAN dialogue partnership, which will be marked by a summit on Jan. 25 in New Delhi. ASEAN leaders have been invited by India to be chief guests at the Republic Day parade in New Delhi on Jan. 26.

About Pravasi Bharatiya Diwas (PBD):

- ✎ PBD is an annual event organised since 2003 by Ministry of External Affairs to foster greater interaction between the Indian Diaspora and Indian government.
- ✎ It is held annually on 9 January to mark the return of Mahatma Gandhi from South Africa to India i.e. on 9 January, 1915.
- ✎ During the event, individuals of exceptional merit are honoured with the prestigious Pravasi Bharatiya Samman Award to appreciate their role in India's growth.

Significance of PBD:

- ✎ It is a very important platform for engagement of the Union Government and the state governments with the overseas Indian community.
- ✎ It provides the single platform to Indian diaspora to put forth their issues and grievances before the government and in turn government can leverage their resources in nation building activities.

Source: PIB

US places Pakistan on 'Special Watch List'

Why in news?

The US has placed Pakistan on a 'Special Watch List' for "severe violations" of religious freedom, making it the only country to be put under the newly-formed list.

Why was Pakistan placed on a 'Special Watch List'?

- ◆ As per US, Pakistan was placed in this list because it continues to harass its religious minorities, tolerates extra-judicial violence in the guise of opposing blasphemy.
- ◆ Moreover, it has state-sanctioned discrimination against groups such as Ahmadis. According to research, Pakistan is one of countries with most restrictions on religion.

What is Special Watch List?

- ◆ The Special Watch List is for countries that engage in or tolerate severe violations of religious freedom but may not rise to level of 'Countries of Particular Concern' (CPC).
- ◆ It is new category created by Frank R Wolf International Religious Freedom Act of 2016.
- ◆ The designations are aimed at improving respect for religious freedom in these countries.

Background:

- ✍ The Special Watch List designation to countries is step below designating it as CPC, which automatically imposes economic and political sanctions.
- ✍ The Frank R Wolf International Religious Freedom Act amended International Religious Freedom (IRF) Act to require President to designate 'Special Watch List' of countries deemed not to meet all of CPC criteria but who engaged in or tolerated severe violations of religious freedom.
- ✍ Under the IRF Act of 1998, US Secretary of State annually designates governments that have engaged in or tolerated systematic, ongoing, and egregious violations of religious freedom as CPC. These designations are aimed at improving the respect for religious freedom in these countries.

Source: The Hindu

US unveiled a list of "Countries of Particular Concern" (CPC)

Why in news?

The US State Department has unveiled its list of countries designated as the worst offenders against religious liberty. These countries are labelled as "Countries of Particular Concern" (CPC).

- ◆ They are Burma (Myanmar), China, Eritrea, Iran, North Korea, Sudan, Saudi Arabia, Tajikistan, Turkmenistan, and Uzbekistan.

What is Countries of Particular Concern (CPC)?

A country is labeled as a CPC after it engages in "systemic, ongoing, [and] egregious" violations of religious liberty.

- ✍ This declaration is in accordance with the International Religious Freedom Act of 1998.
- ✍ The designation of these countries is a key step in ensuring continued U.S. engagement in support of international religious freedom.
- ✍ Also, these designations are aimed at improving the respect for religious freedom in these countries.

Implications:

- ✍ The governments that have been designated as CPCs are subject to 'Presidential Actions', such as sanctions, which may include economic or political measures directed against a government to encourage it to improve the state of religious freedom in its country.

India, USA to co-host Global Entrepreneurship Summit 2017 in India

Why in news?

The Union Cabinet has given its ex-post facto approval for the Memorandum of Understanding (MoU) signed between India and the USA for co-hosting the Global Entrepreneurship Summit (GES) 2017 in India.

- ◆ The MoU delineated the responsibilities, areas of co-operation including logistics and venue related requirements between the parties for smooth conduct of the Summit.

About the Global Entrepreneurship summit (GES):

- ✎ Organised annually since 2010, GES is preeminent annual entrepreneurship gathering that convenes over one thousand emerging entrepreneurs, investors, and supporters from around the world.
- ✎ This is the **first time GES is being held in South Asia.**
- ✎ The event underscores the broad and enduring partnership with India.
- ✎ The four primary focus areas of GES 2017 are Digital Economy and Financial Technology, Health Care and Life Sciences, Energy and Infrastructure, and Media and Entertainment.

About GES 2017:

- ✎ The 8th edition of the Global Entrepreneurship summit (GES) was held in Hyderabad.
- ✎ It was hosted by NITI Aayog in partnership with US government.
- ✎ The summit was attended by 1,500 entrepreneurs from 170 countries.
- ✎ The theme for 2017 GES is “Women First, Prosperity for All”.

Outcomes of GES 2017:

- ☑ The Summit provided opportunities for meeting with global industry leaders, networking of international entrepreneurs, innovators, investors.
- ☑ The summit also provided forum for pitching competition, strategic workshops and sector-programmes to help in creating new collaborations amongst entrepreneurs and Investors.
- ☑ The Summit provided for significantly increased economic opportunities for young entrepreneurs, especially, women entrepreneurs and start-ups.

Source: PIB



Indian Economy & Economic Development

India is world's 3rd largest steel producer

Why in news?

According to recent report published by World Steel Association (WSA), India has overtaken US to become the world's third largest steel producer in 2017.

Key Facts:

- ◆ China has remained world leader by producing 831.7 MT in 2017.
- ◆ Japan is second largest global steel producer.
- ◆ India had grabbed the third slot in steel production in 2015 from the US after long been holding the fourth slot.

About World Steel Association (WSA):

- ✍ WSA is a non-profit organisation.
- ✍ The World Steel Association (worldsteel) was founded as the International Iron and Steel Institute on 10 July 1967. It changed its name to the World Steel Association on 6 October 2008.
- ✍ Its headquartered is in Brussels, Belgium.
- ✍ It is one of the largest industry associations in world. Its members represent approximately 85% of the world's steel production.
- ✍ It includes over 160 steel producers with 9 of the 10 largest steel companies, national and regional steel industry associations, and steel research institutes.

Goals of World Steel Association:

- ✍ To act as the focal point for the steel industry providing global leadership on all major strategic issues impacting the industry, particularly focusing on economic, environmental and social sustainability
- ✍ Deliver benchmarking analysis and drive global improvement initiatives in the areas of environmental protection, technology, safety and people development
- ✍ Promote global market development opportunities for steel and promote steel to the world at large
- ✍ Provide on a timely basis world-class economic data and analysis on the global steel industry and its value chain, as well as assessments on life cycle aspects of steel
- ✍ Increase awareness, understanding and support for the steel industry amongst all external stakeholders and key target audiences worldwide
- ✍ Promote market competition that is free of government interventions preventing fair trade.

Source: The Hindu, Economic Times

Payments banks, small finance banks to offer Atal Pension Yojana

Why in news?

The Union Finance Ministry has relaxed norms of Atal Pension Yojana (APY) to allow small finance banks and payment banks to offer APY distribution.

- ◆ The move is expected to help expand coverage of the scheme and strengthen existing channels of APY distribution.

Background:

- ✎ During financial year 2016-17, the scheme has earned return of 13.91%. There are more than 84 lakh subscribers registered under APY scheme with an asset base of more than Rs. 3,194 crore.
- ✎ At present 233 Banks and Department of Post are involved with the implementation of the scheme.
- ✎ So far, 11 payment banks and 10 small finance banks have received licences from the Reserve Bank of India to start banking operations in India.

About Atal Pension Yojana:

Atal Pension Yojana (APY) is a pension scheme for citizens of India focussed on the unorganised sector workers.

- ✎ Under the APY, guaranteed minimum pension of Rs. 1,000/-, 2,000/-, 3,000/-, 4,000 and 5,000/- per month will be given **at the age of 60 years** in turn for the contribution varying from Rs 42 to Rs 210 per month.
- ✎ The **Pension Fund Regulatory and Development Authority (PFRDA) is the nodal agency for APY** and is working out plans to improve reach and information dissemination.
- ✎ Any Citizen of India between 18 – 40 years of age can join APY scheme.
- ✎ Government co-contribution is available for 5 years, i.e., from 2015-16 to 2019-20 for the subscribers who join the scheme during the period from 1st June, 2015 to 31st December, 2015 and who are not covered by any Statutory Social Security Schemes and are not income tax payers.

The APY scheme follows same investment pattern as applicable to National Pension Scheme (NPS) contribution of Central government employees.

About Payments banks:

- ✎ Payments banks are a new model of banks conceptualised by the Reserve Bank of India (RBI) to meet government's financial inclusion target.
- ✎ It will be set up as a differentiated bank and will confine its activities to acceptance of demand deposits, remittance services, Internet banking and other specified services but cannot undertake lending services.
- ✎ Payments banks can accept deposits up to Rs. 1 lakh per account from individuals and small businesses.
- ✎ Payments banks will mainly deal in remittance services.
- ✎ They will not lend to customers and will have to deploy their funds in government papers and bank deposits.
- ✎ The promoter's minimum initial contribution to equity capital will have to be at least 40% for the first five years.
- ✎ They can issue ATM/debit cards but not credit cards.
- ✎ They can also issue other prepaid payment instruments.

- ✘ They can distribute non-risk sharing simple financial products like mutual funds and insurance products.
- ✘ Non-resident Indians (NRIs) are not be allowed to open accounts in payment banks.
- ✘ Apart from amounts maintained as Cash Reserve Ratio (CRR) with the Reserve Bank on its outside demand and time liabilities, it will be required to invest minimum 75% of its “demand deposit balances” in Statutory Liquidity Ratio (SLR) eligible Government securities/treasury bills with maturity up to one year and hold maximum 25% in current and time/fixed deposits with other scheduled commercial banks for operational purposes and liquidity management.
- ✘ This new model of banking allows mobile firms, supermarket chains and others to cater to banking requirements of individuals and small businesses.

Difference between Payment Banks and Small Finance Banks:

- ☑ The major difference between payment banks and small finance banks is their area of operation. Payment bank can only open savings account and current accounts but cannot lend money while small finance bank’s main aim is to lend money to farmers and small businesses.
- ☑ Usually, major earnings of the bank come from interest difference between deposits and lending but payment banks would run on different niche and their earnings would be from the charges levied on transactions. But in case of small finance banks, their source of earnings would be same as of any other scheduled commercial banks.
- ☑ Payment banks aims to provide banking through high-technology and low-cost operations while small finance banks may or may not be tech-savvy.

Source: PIB, Economic Times, Hindustan Times

Zero Budget Natural Farming project to promote organic farming

Why in news?

Himachal Pradesh Government has recently launched Zero Budget Natural Farming (ZBNF) project to promote organic farming.

- ◆ The project aims to increase agriculture produce and the income of farmers by the year 2022.

What is Zero Budget Natural Farming (ZBNF)?

ZBNF is set of natural farming methods where cost of growing and harvesting plants is zero.

- ✘ It is a farming practice that believes in natural growth of crops without adding any fertilizers and pesticides or any other foreign elements. It is different from organic farming.
- ✘ The word Zero Budget refers to zero net cost of production of all crops. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops.
- ✘ The inputs used for seed treatments and other inoculations are locally available in form of cow dung and cow urine.
- ✘ It requires almost no monetary investment and envisages use of ‘Jeevamrutha’ and ‘Beejamrutha’.
- ✘ The main aim of ZBNF is eliminate use of chemical pesticides and uses biological pesticides and promote of good agronomic practices.
- ✘ Farmers use earthworms, cow dung, urine, plants, human excreta and such biological fertilizers for crop protection.

Significance

- ✘ It lowers cost of inputs of farmers and gives better capacity to increase the incomes.
- ✘ It also protects soil from degradation and helps in retaining soil fertility and is climate change resilient.

Zero Budget Natural Farming in India:

- ✎ ZBNF has attained wide success in southern India, especially the southern Indian state of Karnataka where it first evolved.

Need for such farming methods:

- ☑ The neo-liberalization of the Indian economy led to a deep agrarian crisis that is making small scale farming an unviable vocation.
- ☑ Both traditional farming, using chemical fertilisers and pesticides, and organic farming are becoming unviable for farmers. The organic farming was costlier than the traditional farming as the farm inputs were expensive.
- ☑ Privatized seeds, inputs, and markets are inaccessible and expensive for peasants.
- ☑ Indian farmers increasingly find themselves in a vicious cycle of debt, because of the high production costs, high interest rates for credit, the volatile market prices of crops, the rising costs of fossil fuel based inputs, and private seeds.
- ☑ More than a quarter of a million farmers have committed suicide in India in the last two decades. Various studies have linked farmer's suicides to debt. Debt is a problem for farmers of all sizes in India.

Under such conditions, 'zero budget' farming promises to end a reliance on loans and drastically cut production costs, ending the debt cycle for desperate farmers.

Source: The Hindu

Prompt Corrective Action: Ministry to appraise bank heads**Why in news?**

The Finance Ministry is planning to initiate a performance review of heads of public sector banks that are under the RBI's Prompt Corrective Action (PCA) as part of the reform process.

Background:

- ◆ So far, the Reserve Bank has put 12 public sector banks under watch in view of poor performance on parameters such as high levels of non-performing assets (NPAs), low capital level and low return on assets.
- ◆ These parameters indicate the financial health of banks and a need to initiate remedial measures to put them on the right course.

What is Prompt Corrective Action (PCA)?

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

When is PCA invoked?

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

What are the types of sanctions?

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

What will a bank do if PCA is triggered?

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

*Source: The Hindu***Central Assistance released Under PMKSY by Ministry of Water Resources****Why in news?**

The Union Water Resources Ministry has released central assistance of Rs 246.9 crore for nine prioritised projects under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) for Accelerated Irrigation Benefits Programme (AIBP) works.

About PMKSY:

Pradhan Mantri Krishi Sinchai Yojana (PMKSY) is a national mission to improve farm productivity and ensure better utilization of the resources in the country.

- ◆ It is implemented by Ministries of Agriculture, Water Resources and Rural Development.
- ◆ It seeks to amalgamate three major ongoing irrigation programmes of the Centre –
 1. The Accelerated Irrigation Benefit Programme of Ministry of Water Resources
 2. Integrated Watershed management programme of Ministry of Rural Development and Land Resources, and
 3. The farm water management component of National Mission on Sustainable Agriculture of the Department of Agriculture.
- ◆ The scheme would be implemented in 'mission mode', which means the district administration draws up their own irrigation plan with the help of district forest officers, lead bank officer and other departments. The state irrigation plan will be an amalgamation of all the district plans.
- ◆ The plan additionally calls for bringing ministries, offices, organizations, research and financial institutions occupied with creation and recycling of water under one platform. The goal is to open the doors for optimal water budgeting in all sectors.

Objectives of the PMKSY:

- ✎ The primary objectives of PMKSY are to attract investments in irrigation system at field level, develop and expand cultivable land under assured irrigation (Har Khet ko pani), enhance ranch water use in order to minimize wastage of water, enhance crop per drop by implementing water-saving technologies and precision irrigation.

About Accelerated Irrigation Benefits Program:

Central Government launched the AIBP in the year 1996-97 to provide Central Assistance to major/medium irrigation projects in the country.

- ☑ The objective of the scheme is to accelerate implementation of such projects which were beyond resource capability of the States or were in advanced stage of completion.
- ☑ Priority was given to those projects which were started in Pre-Fifth and Fifth Plan period and also to those which were benefiting Tribal and Drought Prone Areas.
- ☑ From the year 1999-2000 onwards, Central Loan Assistance under AIBP was also extended to minor surface irrigation projects (SMI) of special category States.
- ☑ Later, during 2015-16, PMKSY was conceived amalgamating ongoing three major ongoing irrigation programmes of the Centre.

Source: PIB

NHIDCL inks MoU with IL&FS for Rs 6,808 crore Zojila tunnel project

Why in news?

The Union Ministry of Road Transport & Highways has inked MoU with IL&FS Transportation Networks Ltd for construction of the 14.150 km long, 2-lane bi-directional Zojila Tunnel in Jammu & Kashmir.

Where is Zojila pass situated?

- ◆ Zojila pass is situated at an altitude of 11,578 feet on Srinagar-Kargil-Leh National Highway which remains closed during winters (December to April) due to heavy snowfall and avalanches cutting off Leh-Ladakh region from Kashmir.

About the Zojila pass tunnel:

The Zojila Tunnel will be situated at an altitude of 11,578 feet on Srinagar-Kargil-Leh National Highway (NH-1A).

Aim and objective of the project:

- ☑ The Project aims at construction of 14.150 km long 2-lane bidirectional single tube tunnel with a parallel 14.200 km long egress (escape) tunnel excluding approaches between Baltal & Minamarg in J&K.
- ☑ The main objective of the project is to provide all weather connectivity to strategically important Leh region in J&K which at moment is limited to at best 6 months because of snow on the mountainous passes and threat of avalanches. Ladakh region remains cut off from rest of the country during winter months due to heavy snowfall.

Implementation of the project:

- ☑ The project will be implemented by Union Ministry of Road Transport & Highways (MoRTH) through the National Highways and Infrastructure Development Corporation Limited (NHIDCL) on Engineering, Procurement and Construction (EPC) mode.

Significance of the project:

- ☑ This would be India's longest road tunnel and longest bi-directional tunnel in Asia.
- ☑ The construction of this tunnel will provide all weather safe, fast and cheap connectivity between Srinagar, Kargil and Leh.
- ☑ It will bring about all round economic and socio-cultural integration of these regions.
- ☑ It also has strategic and socio-economic importance and it will be instrument for development of economically backward districts in J&K.
- ☑ The project, on completion, will also lead to enormous boost in employment as local businesses get linked to National market and beautiful region is able to receive round the year tourist traffic.

Source: PIB, Economic Times

Mauritius largest source of FDI in India: RBI

Why in news?

Recently the Reserve Bank of India (RBI) has recently released '**Census on Foreign Liabilities and Assets of Indian Direct Investment Companies 2016-17**'.

- ◆ As per the census, Mauritius was the highest source of India's Foreign Direct Investment (FDI), followed by the US and UK in 2016-17.

Background:

- ✍ The census yields comprehensive information on the market value of foreign liabilities and assets of Indian companies arising on account of FDI, ODI and other investments.
- ✍ It is important to note that changes in outstanding asset/liabilities would be different from flows recorded in the balance of payments (BoP) during a year, as the former would also include valuation changes due to price and exchange rate movements.

Highlights of the census report:

- ✍ Mauritius was the largest source of FDI in India (21.8 percent share at market value), followed by the USA, the UK, Singapore and Japan.
- ✍ Singapore (19.7 percent) was the major FDI destination, followed by the Netherlands, Mauritius, and the USA.
- ✍ According to the data, manufacturing sector accounted for nearly half of the total FDI at market prices.
- ✍ Information and communication services and financial and insurance activities were the other major sectors that attracted FDI.
- ✍ Ninety-six percent of the responding companies were unlisted in March 2017 and most of them had received only inward FDI; unlisted companies had a higher share of FDI equity capital vis-à-vis listed companies.

Source: The Hindu, Indian Express

India Ranked 30th On WEF's Global Manufacturing Index

Why in news?

The World Economic Forum (WEF) has ranked India at 30th position on a **Global Manufacturing Index (GMI)**.

About the Global Manufacturing Index (GMI):

- ◆ The index was released as part of **WEF's first Readiness for the future of production Report** which analysed development of modern industrial strategies and urges collaborative action.
- ◆ The report has been developed in collaboration with A T Kearney and calls for new and innovative approaches to public-private collaboration are needed to accelerate transformation.
- ◆ The report has categorised 100 countries in four major groups for its ranking:
- ◆ **Leading** (strong current base, high level of readiness for future).
- ◆ **High Potential** (limited current base, high potential for future).
- ◆ **Legacy** (strong current base, at risk for future).
- ◆ **Nascent** (limited current base, low level of readiness for future).

Highlights of the report:

- ✍ Japan has topped the list followed by South Korea, Germany, Switzerland, China, Czech Republic, the US, Sweden, Austria and Ireland.

- ✎ Among BRICS nations, Russia is ranked 35th, Brazil 41st and South Africa at 45th place.
- ✎ China (25th) was placed among 'leading countries'. **India and Russia were placed in 'Legacy' group** while Brazil and South Africa are in 'nascent' ones.
- ✎ Other countries that ranked below India include Turkey, Indonesia, Canada, Australia, New Zealand, Mauritius and UAE.

India's performance:

- ✎ India is at the 30th position, five places below China, but higher than the other BRICS members Brazil, Russia and South Africa.
- ✎ India was ranked 9th in terms of scale of production and at 48th place for complexity. It was ranked 3rd for market size. It was ranked poorly (90th or even lower) in parameters like female participation in labour force, trade tariffs, regulatory efficiency and sustainable resources.
- ✎ Overall, India ranked better than its neighbours Sri Lanka (66th), Pakistan (74th) and Bangladesh (80th).
- ✎ India is 5th-largest manufacturer in world with total manufacturing value added of over US \$420 billion in 2016.
- ✎ India's manufacturing sector has grown by over 7% per year on average in past three decades and accounts for 16-20% of India's GDP. Demand for Indian manufactured products is rising.

Key note for India:

- ☑ India has room for improvement across the drivers of production, except for demand environment where it ranks in the top 5.
- ☑ Human capital and sustainable resources are the two key challenges for India.
- ☑ India needs to continue to raise the capabilities of its relatively young and fast-growing labour force. This entails upgrading education curricula, revamping vocational training programmes and improving digital skills.
- ☑ India should also continue to diversify its energy sources and reduce emissions as its manufacturing sector continues to expand.

Source: The Hindu, Economic Times, Indian Express

Nanaji Deshmukh Krishi Sanjivani Yojna

Why in news?

Maharashtra Government has recently approved Nanaji Deshmukh Krishi Sanjivani Yojna, a Rs.4,000-crore project aimed at promoting climate-resilient agriculture.

Key facts:

- ◆ The scheme will be roll out in 2018-19 and continue till 2023-24.
- ◆ The scheme would cover small- and medium- scale farmers, who are more vulnerable to the impact of climate change.
- ◆ The total cost of the project is Rs 4,000 crore, 70 per cent of which will be borne by the World Bank while the state will contribute 30 per cent over six years

Key objectives of Nanaji Deshmukh Krishi Sanjivani Yojana:

The primary objective is to promote increase the agricultural yields even after the changes in climate. Moreover, the other objectives include:

1. To improve Soil Quality
2. Developing varieties of Food-Grains which can sustain variations.
3. To adopt essential changes in the Crop Pattern as per the availability of water in such regions.

4. To make Maharashtra absolutely drought free.

Under this scheme, state government will lay special emphasis on the cultivation of crops as per the availability of water.

Background:

The Scheme has been named after social activist Nanaji Deshmukh who has worked in fields of education, health, and rural self-reliance, and has been honoured with Padma Vibhushan.

Source: Economic Times

India: Financial Sector Assessment Program 2017-Detailed Assessment Reports (DARs)

Why in news?

The International Monetary Fund (IMF) and the World Bank have recently released the two main Reports of the 2017 India Financial Sector Assessment Programme (FSAP).

- ◆ Last FSAP for India was conducted in 2011-12.

The reports include:

1. The Financial System Stability Assessment (FSSA) and
2. The Financial Sector Assessment (FSA)

In continuation, the IMF and the World Bank also released two Detailed Assessment Reports (DARs) relating to the 2017 India FSAP.

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

Highlights of the report:

The FSAP report among others acknowledges many efforts by Indian authorities like:

- ✍ Tackling Non-Performing Assets (NPAs),
- ✍ Recent recapitalization measures for banks and introduction of special resolution regime,
- ✍ Formalization of National Pension System (NPS) and making the pension sector regulator statutory,
- ✍ Passing of Insolvency and Bankruptcy Code and setting up of Insolvency and Bankruptcy Board of India (IBBI).
- ✍ Initiatives such as 'no frills' account (under Jan Dhan Yojana),
- ✍ Promoting digitization,
- ✍ Introduction of unique biometric identification number (AADHAR),
- ✍ Currency exchange initiative etc.

It also recognizes the improved inter-agency co-operation since the establishment of Financial Stability and Development Council (FSDC), supported by its Sub-Committee and four technical groups and progress in setting up of Financial Data Management Centre (FDMC).

About Financial Sector Assessment Program (FSAP):

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

What is it all about?

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

Approaches:

The FSAP follows a three-pronged approach when looking at the country's financial sector:

- ☑ The soundness of a financial system versus its vulnerabilities and risks that increase the likelihood or potential severity of financial sector crises.
- ☑ A country's developmental needs in terms of infrastructure, institutions and markets.
- ☑ A country's compliance with the observance of selected financial sector standards and codes.

Source: PIB

India's First Agri-commodity Options Contracts in Guar Seed**Why in news?**

Finance Minister Arun Jaitley launched options trading in guarseed on the commodity bourse National Commodity and Derivatives Exchange (NCDEX).

- ◆ NCDEX is the second exchange after MCX to launch options trading in commodities. In October 2017, MCX had launched gold options. Guarseed is the first agri-commodity options.

Objective of the move:

- ◆ Higher production has led to fall in prices of some agri-commodities in some places. Options trading are one of the major steps towards taking farmers out of this situation.
- ◆ This new initiative will benefit farmers and ensure better prices in the coming days.

Key facts:

The largest commodity exchange by volume is the Multi Commodity Exchange (MCX) followed by National Commodity and Derivatives Exchange (NCDEX).

Source: PIB, Economic Times, Business Standard

Centre to declare 2018 as 'national year of millets'**Why in news?**

Nutrient-rich millets have got a boost with the Union government deciding to declare 2018 as the 'national year of millets'.

- ◆ This decision has been taken following a request by Karnataka, which is the country's leader in the millet sector.

Background:

- ◆ Earlier in November 2017, India had forwarded proposal to United Nations (UN) for declaring year 2018 as 'International Year of Millets'.

Significance

- ✎ Observation of Year of Millets will help in promotion of production and consumption of millets will substantially contribute in fight against targeted hunger and mitigate effect of climate change in long run.
- ✎ Popularizing millets will also benefit future generations of farmers as well as consumers.

All about Millets:

- ✎ Millet is a common term that categorize small-seeded grasses termed as 'Nutri-Cereals' or 'Dryland-Cereals'.
- ✎ These nutri-cereals are sorghum, pearl millet, ragi, small millet, foxtail millet, proso millet, barnyard millet, kodo millet and other millets.
- ✎ Millet is an important staple cereal crop for millions of dryland farmers across Sub-Saharan Africa and Asia.

Benefits of Millets:

- ☑ Millets are smart food and good for consumers, farmers and planet multiple and has untapped uses such as food, feed, biofuels and brewing.
- ☑ Millets offer nutrition, income and livelihood for farmers even in difficult times.
- ☑ They can be used in various forms such as food, feed, fodder, biofuels and brewing.
- ☑ They are nutritionally superior to wheat & rice as they have higher levels of protein with more balanced amino acid profile, crude fiber & minerals such as Iron, Zinc, and Phosphorous.
- ☑ They can offer nutritional security and act as a shield against nutritional deficiency, especially among children and women.
- ☑ Some major deficiencies such as anaemia (iron deficiency), B-complex vitamin deficiency, pellagra (niacin deficiency) can be dealt easily with intake of less expensive but nutritionally rich millets.
- ☑ Millets can also help tackle health challenges such as obesity, diabetes and lifestyle problems as they are gluten free, have a low glycemic index and are high in dietary fibre and antioxidants.
- ☑ Moreover, in times of climate change, they will be the last crop standing and will be a good risk management strategy for resource-poor marginal farmers.
- ☑ As per the government, Millets are Smart Food as they are 'Good for You, Good for the Farmer and Good for the Planet'.

Source: The Hindu

Cabinet approves major changes in FDI policy

Why in news?

The Union Cabinet has given its approval to a number of amendments in the FDI Policy.

- ◆ These are intended to liberalise and simplify the FDI policy so as to provide ease of doing business in the country.
- ◆ In turn, it will lead to larger FDI inflows contributing to growth of investment, income and employment.

Amendments in FDI policy:

- ✎ 100% FDI under automatic route for Single Brand Retail Trading
- ✎ 100% FDI under automatic route in Construction Development
- ✎ Foreign airlines allowed to invest up to 49% under approval route in Air India
- ✎ FIIs/FPIs allowed to invest in Power Exchanges through primary market
- ✎ Definition of 'medical devices' amended in the FDI Policy

FDI policy reforms:

Foreign Direct Investment (FDI) is a major driver of economic growth and a source of non-debt finance for the economic development of the country.

- ☑ Government has put in place an investor friendly policy on FDI, under which FDI up to 100%, is permitted on the automatic route in most sectors/ activities.
- ☑ In the recent past, the Government has brought FDI policy reforms in a number of sectors viz. Defence, Construction Development, Insurance, Pension, Other Financial Services, Asset reconstruction Companies, Broadcasting, Civil Aviation, Pharmaceuticals, Trading etc.
- ☑ Measures undertaken by the Government have resulted in increased FDI inflows in to the country.

Source: PIB

MoU signed for completion of North Koel Reservoir Project

Why in news?

The Union Ministry of Water Resources, River Development and Ganga Rejuvenation has inked Memorandum of Understanding (MoU) with Bihar and Jharkhand for completion of balance works of **North Koel reservoir project**.

- ◆ Moreover, supplementary Memorandum of Agreement (MoA) was signed between Ministry of Water Resources, National Water Development Agency, NABARD with both states for funding under **Long Term Irrigation Fund (LTIF)** for the project.

Background:

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

About North Koel Reservoir Project:

The project is situated on North Koel river which is a tributary of Sone river finally joining the river Ganga.

- ✎ The North Koel Reservoir is located in the most backward tribal areas in Palamau and Garhwa districts of Jharkhand State.
- ✎ The construction was originally started in the year 1972 and continued till 1993 when it was stopped by the Forest Department, Govt. of Bihar. Since then, the work on dam is at a standstill.
- ✎ The project aims to provide irrigation to 111,521 hectares of land annually in the most backward and drought prone areas of Palamu & Garhwa districts in Jharkhand and Aurangabad & Gaya districts in Bihar.

About North Koel River:

- ☑ North Koel River rises on Ranchi plateau in Jharkhand.
- ☑ It joins the Sone River (only right bank tributary of Ganga River) a few miles north-west of Haidarnagar.
- ☑ Its principal tributaries are the Auranga and the Amanat.
- ☑ It meanders through the northern part of Betla National Park.

Source: PIB, The Hindu

Nod for continuing MPLAD scheme till March 2020

Why in news?

The Cabinet Committee on Economic Affairs (CCEA) has given its approval to continuation of Members of Parliament Local Area Development Scheme (MPLADS) till term of 14th Finance Commission i.e. 2020.

Implications of this move:

- ◆ The continuation of scheme will entail annual allocation of Rs.3,950 crore and total outlay of Rs. 11,850 crores over next 3 years.

About MPLAD Scheme:

The MPLAD Scheme is Central Sector Scheme launched in 1993-94.

Objective:

- ✎ To provide a mechanism for the Members of Parliament to recommend works of developmental nature for creation of durable community assets and for provision of basic facilities including community infrastructure, based on locally felt needs.

What kind of works can be recommended?

- ✎ Works, developmental in nature, based on locally felt needs and always available for the use of the public at large, are eligible under the scheme.
- ✎ Preference under the scheme is given to works relating to national priorities, such as provision of drinking water, public health, education, sanitation, roads, etc.

Role of MPs:

- ✎ Role of MPs for the projects is only recommendatory i.e. they can only recommend their choice of works to concerned district authorities who implement these works by following the established procedures of the concerned state government.

Recommending powers of MPs

- ✎ The Lok Sabha Members can recommend works in their respective constituencies.
- ✎ The Rajya Sabha Members of Parliament can recommend works in one or more districts in the State from where he/she has been elected.
- ✎ The Nominated Members of the Lok Sabha and Rajya Sabha may select any District in the Country for implementation of their choice of work under the scheme.

Implementation:

- ✎ The Ministry of Statistics and Programme Implementation (MSPI) is nodal ministry to coordinate work under scheme.
- ✎ The scheme is governed by set of guidelines (last revised in June, 2016).

Execution of works:

- ✎ The MPs recommend their choice of works to the concerned district authorities who implement these works by following the established procedures of the concerned state government.
- ✎ The district authority is empowered to examine the eligibility of works sanction funds and select the implementing agencies, prioritise works, supervise overall execution, and monitor the scheme at the ground level.

Funds:

- ✎ Under this scheme, the funds are released in the form of grants in-aid directly to the district authorities on receipt of requisite documents and as per these guidelines.
- ✎ The funds released under the scheme are non-lapsable i.e. if the fund for particular work is not spent in that year, it will be carried forward to the subsequent years, subject to eligibility.
- ✎ The annual entitlement under the scheme per MP at present is Rs 5 crore.

Analysis of the scheme:

- ✎ Since its inception of the scheme, a total number of 18,82,180 works for Rs. 44,929.17 crore have been sanctioned till August, 2017 from MPLADS fund.
- ✎ It has resulted into creation of various durable community assets which have impacted the social, cultural and economic life of the local communities in one way or the other.

Source: PIB

Gujarat tops new logistics index that flags inefficiency of states

Why in news?

Gujarat has topped Logistics Ease Across Different States (LEADS) index, a logistics index chart, which is an indicator of the efficiency of logistical services necessary for encouraging exports and economic growth.

About LEADS index:

The LEADS index is a composite indicator to assess international trade logistics across States/UTs based on stakeholders' survey conducted by Deloitte for Ministry of Commerce and Industry.

- ✎ LEADS is based on eight parameters such as infrastructure, services, timeliness, track and trace, competitiveness of pricing, safety of cargo, operating environment and regulatory process.
- ✎ LEADS is loosely based on World Bank's biannual Logistics Performance Index (LPI) on which India was ranked 35 among 160 countries in 2016, up from 54 in 2014.
- ✎ It aims to serve as an indicator of efficiency of logistical services necessary for promoting exports in particular and economic growth in general.

Highlights of the index:

- ✎ Punjab has acquired second position followed by Andhra Pradesh, Karnataka and Maharashtra.
- ✎ Among the Union Territories, Daman & Diu occupied top slot followed by NCT Delhi and Chandigarh.
- ✎ As regards the hilly states, Tripura was on top followed by Mizoram and Meghalaya.

Challenges:

- ✎ The study found that supply chain efficiencies and economies of scale are yet to be unlocked, mostly due to suboptimal investment in building scale in infrastructure, automation, human capital and technology.
- ✎ It also highlighted problems such as inadequate terminal capacity, poor last-mile terminal connectivity and issues in regulatory services provided by government agencies, among others.
- ✎ It also underlined issues specific to certain states.

Suggestions:

- ✎ The report has identified focus areas where action can help improve. Regulation through cumbersome rules, rigid slabs for rail cargo, poor customs facilities and frequent stoppages have been flagged as challenges.
- ✎ Similarly, it has suggested that digitisation and last mile connectivity, specially road links to ports and airports, or inadequate capacity at ports in addition to lack of grievance mechanism, need to be addressed.

Background:

- ✎ In a major push to developing an integrated logistics framework in the country, including industrial parks, cold chains and warehousing facilities, the government in November granted infrastructure status to the logistics sector, enabling the industry to access cheaper finances.
- ✎ The government also created the position of a special secretary in the commerce ministry to exclusively handle logistics.

Source: Live Mint, Economic Times

CBDT relaxes norms for MAT on firms facing insolvency

Why in news?

In a bid to provide taxation relief to the companies facing corporate insolvency proceedings, the Income Tax Department has decided to relax norms for levy of Minimum Alternate Tax (MAT) from the current financial year 2017-18.

What is Minimum Alternate Tax (MAT)?

- ✎ The concept of MAT was introduced under the Income Tax Act, 1961 to tax 'Zero Tax' companies i.e. companies that make high book profit and declare substantial dividends to their shareholders but have no or insignificant taxable income under the Income Tax Act.
- ✎ MAT is a way of making companies pay minimum amount of tax.
- ✎ As per Section 115JB of the Income Tax Act, MAT is levied on book profit after deducting the amount of loss brought forward or unabsorbed depreciation, whichever is less.

Background:

- ☑ This decision was taken based on suggestions of various stakeholders suggesting hardship faced by companies against whom application for corporate insolvency resolution process was admitted by Adjudicating Authority due to restriction in allowance of brought forward loss for computation of book profit.
- ☑ The Indian Banks Association (IBA) also had sought removal of MAT for new investors apprehending depressed bids.

Source: Indian Express

Cryptocurrencies are a Ponzi scheme

Why in news?

The government has joined the Reserve Bank of India in cautioning potential customers from investing in cryptocurrencies such as Bitcoin, likening them to Ponzi schemes.

Background:

- ◆ The government of India is yet to introduce regulations covering the digital currency market, but it already created an interdisciplinary committee to research and to develop a regulatory framework for the sector. The committee's members included the country's central bank, the Reserve Bank of India (RBI).
- ◆ Meanwhile, the Indian Supreme Court has issued an appeal to the government in November to start the drafting of a regulatory framework to 'control the flow of Bitcoin' in the country.
- ◆ Despite its latest warning, the finance ministry has not implemented a total ban on virtual currency trading and has not announced any measures that will curb the adoption and trading of digital currencies in India.

What are the Virtual Currencies?

- ✎ Virtual Currencies, also called as digital/crypto-currencies, are a type of unregulated digital money that is neither issued by a central bank/public authority, nor is necessarily attached to a fiat currency, but is used and accepted among the members of a specific virtual community.
- ✎ They are capable of being transferred, stored or traded electronically.
- ✎ The examples of virtual currencies are Bitcoin, Litecoin, Darkcoin, Peercoin, Dogecoin, Primecoin etc.

What are the concerns associated with Virtual Currencies?

In recent times, there has been a phenomenal increase in the price of virtual 'currencies' (VCs) including Bitcoin, in India and globally. **India now accounts for over 10 per cent of the global Bitcoin trade.**

- ✎ VCs don't have any intrinsic value and are not backed by any kind of assets. The price of Bitcoin and other VCs therefore is entirely a matter of mere speculation resulting in spurt and volatility in their prices.
- ✎ The price of Bitcoin and other virtual currencies therefore is entirely a matter of mere speculation resulting in spurt and volatility in their prices. There is a real and heightened risk of investment

bubble of the type seen in Ponzi schemes, which can result in sudden and prolonged crash and result in retail consumers losing their hard-earned money.

- ✎ Virtual currency (VC) transactions are encrypted and are likely being used for terror-funding, smuggling, drug trafficking and money laundering.
- ✎ Besides, VCs are not reliable as they are stored in digital/electronic format, making them vulnerable to hacking and malware attack.

What is the meaning of Ponzi schemes?

A Ponzi scheme is a fraudulent investing scam promising high rates of return with little risk to investors.

- ✎ The scheme is named after Charles Ponzi, who became notorious for using the technique in 1920.
- ✎ The Ponzi scheme generates returns for older investors by acquiring new investors.
- ✎ This is similar to a pyramid scheme in that both are based on using new investors' funds to pay the earlier backers.

Why do Ponzi schemes collapse?

With little or no legitimate earnings, Ponzi schemes require a consistent flow of money from new investors to continue. Ponzi schemes tend to collapse when it becomes difficult to recruit new investors or when a large number of investors ask to cash out.

Source: The Hindu

National Bank for Agriculture and Rural Development (Amendment) Bill, 2017

Why in news?

Parliament has passed the National Bank for Agriculture and Rural Development (Amendment) Bill, 2017 with the approval of Rajya Sabha. Lok Sabha already had passed the bill in August 2017.

- ◆ The Bill seeks to amend National Bank for Agriculture and Rural Development (NABARD) Act, 1981.
- ◆ The Act establishes NABARD for providing and regulating facilities like credit for agricultural and industrial development in the rural areas.

Highlights of the Bill

- ✎ The Bill allows Union Government to increase capital of NABARD from Rs. 5000 crore to Rs 30,000 crore.
- ✎ Further, it allows Union Government to increase the capital more than Rs 30,000 crore in consultation with the Reserve Bank of India (RBI), if necessary.
- ✎ The Bill provides that Union Government alone must hold at least 51% capital share of NABARD. Further, it transfers share capital held by RBI valued at Rs. 20 crore to Union Government. Currently RBI holds 0.4% of paid-up capital of NABARD and remaining 99.6% is held by Union government and this causes conflict in RBI's role as banking regulator and shareholder in NABARD.
- ✎ The Bill replaces terms 'small-scale industry' and 'industry in tiny and decentralised sector' with terms 'micro enterprise', 'small enterprise' and 'medium enterprise' as defined in MSME Development Act, 2006. Further, it allows NABARD to provide financial assistance to banks if they provide loans to the MSMEs.
- ✎ The Bill substitutes references to provisions of the Companies Act, 1956 with references to the Companies Act, 2013. It includes provisions dealing with definition of a government company and qualifications of auditors.

About NABARD:

National Bank for Agriculture and Rural Development (NABARD) is an apex development and specialized bank established in July 1982 by an act by the parliament of India.

- ☑ It is one of the premier agencies providing developmental credit in rural areas.
- ☑ NABARD is India's specialised bank for Agriculture and Rural Development in India.
- ☑ Its main focus is to uplift rural India by increasing the credit flow for elevation of agriculture & rural non-farm sector.
- ☑ It was established based on the recommendations of the Committee set up by the Reserve Bank of India (RBI) under the chairmanship of Shri B. Shivaraman.
- ☑ It replaced the Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of Reserve Bank of India, and Agricultural Refinance and Development Corporation (ARDC).

Source:PIB

Cabinet approves extension of norms for mandatory packaging in Jute Materials**Why in news?**

The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Narendra Modi has given its approval for mandatory packaging of foodgrains and sugar in the jute material for the Jute Year 2017-18 (from 1st July 2017 to 30th June, 2018).

- ◆ The mandatory extension was approved under the Jute Packaging Material (JPM) Act, 1987.

Key features of the new norms:

- ◆ The approval mandates that 90% of food grains and 20% of sugar products shall be mandatorily packed in jute bags.
- ◆ The decision also mandates, in the first instance, the entire requirement for packing of food grains would be placed in jute bags thus, making a provision for 100% packing of food grains in jute bags subject to the ability of the jute industry to meet the requirement.

Impact of the decision:

- ◆ The decision will benefit farmers and workers located in the Eastern and North Eastern regions of the country particularly in West Bengal, Bihar, Odisha, Assam, Andhra Pradesh, Meghalaya and Tripura.

Jute industry in India:

- ◆ Jute industry is predominantly dependent on Government sector which purchases jute products more than Rs. 5,500 crore every year.
- ◆ Nearly 3.7 lakh workers and approximately 40 lakh farmers are dependent for their livelihood on jute sectors.

Measures taken by Government to give a boost to Jute industry:

Government has been making concerted efforts for the development of jute sector.

- ☞ With a view to boosting demand in the jute sector, Government of India has imposed **Definitive Anti Dumping Duty** on import of jute goods from Bangladesh and Nepal with effect from 5th January, 2017. As a result of these measures, 13 Twine mills in Andhra Pradesh had resumed operation, benefitting 20000 workers.
- ☞ Further, imposition of Definitive Anti Dumping Duty has provided scope for an additional demand of 2 lakh MT of jute goods in the domestic market for the Indian jute industry.
- ☞ In order to improve the productivity and quality of raw jute through a carefully designed intervention, called the **Jute ICARE**, the Government has been supporting close to one lakh jute farmers by disseminating improved agronomic practices such as line sowing using seed drills, weed management by using wheel-hoeing and nail-weeders, distribution of quality certified

seeds and also providing microbial assisted retting. These interventions have resulted in enhancing the quality and productivity of raw jute and increasing income of jute farmers by Rs. 10,000 per hectare.

- ✎ In order to support jute farmers, **Jute Corporation of India (JCI) has been given a grant** of Rs. 204 crore for 4 years starting from 2014-15 to enable JCI to conduct MSP operations and ensure price stabilization in the jute sector.
- ✎ With a view to supporting diversification of jute sector, the National Jute Board has collaborated with National Institute of Design and a Jute Design Cell has been opened at Gandhinagar.
- ✎ Promotion of Jute Geo Textiles and Agro-Textiles has been taken up with the state governments particularly those in the North Eastern region and also with departments such as Ministry of Road Transport and Ministry of Water Resources.
- ✎ In order to promote transparency in jute sector, **Jute SMART an e-govt initiative** was launched in December, 2016, providing an integrated platform for procurement of B-Twill sacking by Government agencies. Further, the JCI is transferring 100% funds to jute farmers online on the jute procurement under MSP and commercial operations.

Source: PIB

Cabinet approves Jal Marg Vikas Project on NW-1

Why in news?

The Cabinet Committee on Economic Affairs (CCEA) has approved implementation of Jal Marg Vikas Project (JMVP) for capacity augmentation of navigation on 1,380-km Haldia-Varanasi stretch of National Waterway-1 (NW1) on Ganga River.

- ◆ The project will be implemented at a cost of over Rs. 5,370 crore rupees with the technical assistance and investment support of the World Bank.
- ◆ It is expected to be completed by March, 2023.

What is Jal Marg Vikas Project?

- ✎ Jal Marg Vikas Project is a project on the river Ganga that envisages the development of waterway between Allahabad and Haldia that will cover a distance of 1620 km.
- ✎ It aims to develop a fairway with three metres depth to enable commercial navigation of at least 1500 tonne vessels on the river.
- ✎ The project includes the development of fairway, multi-modal terminals, strengthening of open river navigation technique, conservancy works, modern River Information System (RIS) etc.

Significance of Jal Marg Vikas Project:

- ✎ Alternative mode of transport that will be environment friendly and cost effective. The project will contribute in bringing down the logistics cost in the country.
- ✎ Mammoth Infrastructure development like multi-modal and inter-modal terminals, Roll on – Roll off (Ro-Ro) facilities, ferry services, navigation aids. Socio-economic impetus; huge employment generation.

What is River Information system?

- ✎ River Information system (RIS) RIS is a combination of modern tracking equipment comprising of hardware and software designed to optimise transport and traffic processes in inland water navigation.
- ✎ The system has the capability to enhance swift electronic data transfer between mobile vessels and Base stations through advance and real-time exchange of information.
- ✎ It enables safe and efficient inland water transport by avoiding risks such as (i) Ship-to-Ship collisions. (ii) Ship-Bridge collisions. (iii) Groundings.

✎ **Inland Waterway Authority of India (IWAI) is implementing the RIS in India.**

About NW-1:

- ☑ National Waterway-1 (NW-1) is a waterway passing through Uttar Pradesh, Bihar, Jharkhand and West Bengal, potentially serving the major cities of Haldia, Howrah, Kolkata, Bhagalpur, Patna, Ghazipur, Varanasi, Allahabad and their industrial hinterlands including several industries located along the Ganga basin.

About Inland Waterways Authority of India:

- ☑ Inland Waterways Authority of India (IWAI) is the statutory body in charge of the waterways in India.
- ☑ Its headquarters is located in Noida, UP.
- ☑ Its main function is to build the necessary infrastructure in the inland waterways, surveying the economic feasibility of new projects and also carrying out administration and regulation.

Source: PIB, The Hindu



Ecology & Environment

India ranks 177 out of 180 in Environmental Performance Index

Why in news?

On the sidelines of World Economic Forum meet in Davos, the 2018 Environmental Performance Index (EPI) was released.

About the index:

- ◆ EPI has been developed by Yale University and Columbia University in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission.
- ◆ The overall EPI is based on a country's performance in 10 environmental issue categories and two policy objectives viz. **Environment health** and **Ecosystem Vitality**.
- ◆ High rank in the EPI shows long-standing commitments to protecting public health, preserving natural resources and decoupling greenhouse gas (GHG) emissions from economic activity.

Highlights of the report:

TOP 5

- ✓ Switzerland
- ✓ France
- ✓ Denmark
- ✓ Malta
- ✓ Sweden

BOTTOM 5

- ✓ Nepal
- ✓ India
- ✓ The Democratic Republic of Congo
- ✓ Bangladesh
- ✓ Burundi

Global:

- ◆ Top 5 countries are Switzerland, France, Denmark, Malta and Sweden.
- ◆ Top bottom countries are **Nepal, India, Congo, Bangladesh, Burundi**.

India's performance:

- ✗ India has been ranked 177 among 180 countries.
- ✗ The report has ranked India as fourth worst country worldwide in curbing environmental pollution. India has slipped from 141st position in 2016 report.
- ✗ India's overall low ranking—177 among 180 countries—was linked to poor performance in the environment health policy and deaths due to air pollution categories.
- ✗ India is among the bottom five countries on the Index. Overall, India (at 177) and Bangladesh (179) come in near the bottom of the rankings.

Reasons for India's low performance:

- ✗ India's low scores are influenced by poor performance in the environmental health policy objective.

- ✎ Deaths attributed to PM2.5 have risen over the past decade and are estimated at 1,640,113, annually (Institute for Health Metrics and Evaluation, 2017).
- ✎ Despite government action, pollution from solid fuels, coal and crop residue burning, and emissions from motor vehicles continue to severely degrade the air quality.

Concerns raised by the report:

- ☑ The low rank of emerging economies including China (120) and India (177) indicates strain population pressures and rapid economic growth impose on the environment.
- ☑ As per the report, substantial populations still suffer from poor air quality, most notably in India, China, and Pakistan (169).
- ☑ Globally, air quality is the leading environmental threat to public health.
- ☑ In 2016, the Institute for Health Metrics and Evaluation estimated that diseases related to airborne pollutants contributed to two-thirds of all life-years lost to environmentally related deaths and disabilities.
- ☑ Pollution is particularly severe in places such as India and China, where greater levels of economic development contribute to higher pollution levels.
- ☑ Further, as countries develop, increased population growth in large cities, as well as increased industrial production and automotive transportation, continue to expose people to high levels of air pollution.

Way ahead:

Report notes that the low scores on the EPI are indicative of the need for national sustainability efforts on a number of fronts, especially cleaning up air quality, protecting biodiversity and reducing GHG (Green House Gas) emissions.

Source: The Hindu

India hits 20GW solar capacity milestone

Why in news?

According to a latest research report, India has achieved 20 GW (giga watt) cumulative solar capacity, achieving the milestone four years ahead of the target for 2022 originally set in the National Solar Mission.

India's achievements:

- ◆ India's utility-scale cumulative installations now stand at approximately 18.4 GW, with rooftop solar accounting for another 1.6 GW.
- ◆ For the first time, solar was the top source of new power capacity additions in India during calendar year 2017. Solar installations reached 9.6 GW and accounted for 45% of total capacity additions.
- ◆ The top state for solar installations was Telangana, followed by Karnataka, Andhra Pradesh, and Rajasthan.

Challenges ahead:

- ✎ The country has reached the milestone at a time when protectionist measures threaten to slow down activity in the industry.
- ✎ The pace of overall solar installations is expected to be less impressive in 2018 as several protectionist government policies appear poised to increase costs and uncertainty.
- ✎ Also, experts say Centre's revised solar installation target of 100 GW by 2022 has recently been clashing with Make in India Initiative to promote domestic manufacturing.
- ✎ The recently announced 70% preliminary safeguard duty recommendation, the ongoing anti-dumping case, and a 7.85% port duty on imported modules are together creating an atmosphere of regulatory uncertainty that is taking a toll on the industry and slowing down installation activity.

Way ahead:

- ✎ The 20 GW of solar installations is a laudable achievement for India. However, it took eight long years to reach 20 GWs and hopefully the pace will pick up soon.

About the National Solar Mission:

- ✎ National Solar Mission, launched in 2010, aims to establish India as a global leader in solar energy by creating the policy conditions for its diffusion across the country as quickly as possible.
- ✎ The mission is one of the several initiatives that are part of the National Action Plan on Climate Change.
- ✎ The objective of the National Solar Mission is to establish India as a global leader in solar energy, by creating the policy conditions for its diffusion across the country as quickly as possible.

Target:

- ☑ The Mission has set the ambitious target of deploying 20,000 MW of grid connected solar power by 2022 and aims at reducing the cost of solar power generation in the country.
- ☑ The target of 20GW by 2022 was later increased to 100 GW in the 2015 Union budget of India.

Source: The Hindu

‘Environment ministry to start ‘Himalayan Research Fellowships scheme’**Why in news?**

The Union Ministry of Environment, Forest and Climate Change (MoEFCC) has decided to start a ‘Himalayan Research Fellowships scheme’.

About the Himalayan Research Fellowship Scheme:

The Himalayan Research Fellowship Scheme is among the series of programmes that MoEFCC is running for conservation and protection of Himalayas.

- ✎ The scheme aims scheme’ to create a young pool of trained environmental managers, ecologists and socio-economists. This pool will help generate information on physical, biological, managerial and human aspects of Himalayan environment and development.

Funding:

- ☑ The financial support will be provided **under the National Mission on Himalayan Studies (NMHS)** and the fellowships will be awarded for a maximum period of three years and last date for submitting fellowship proposals is 12 February.

Implementation:

- ☑ The fellowship scheme will be executed through various universities and Institutions working in the Indian Himalayan Region (IHR) and preference will be given to the Institutions from north-eastern states.

Focus areas:

- ☑ The research may be undertaken in any of the identified broad thematic areas (BTAs) of the NMHS.
- ☑ Some of the broad thematic areas that are being focused on for research under the NMHS are water resource management including rejuvenation of springs and catchments, hydropower development, assessment and prediction of water-induced hazards, livelihood options including ecotourism opportunities, biodiversity management including recovery of threatened species and skill development.

Source: Live Mint

Australia launches mass cull of coral-eating starfish to save Great Barrier Reef

Why in news?

In a push to preserve the World Heritage-listed ecosystem, the Australian government has announced a multimillion-dollar campaign to stop the predatory crown-of-thorns starfish devouring the Great Barrier Reef.

Need of such move:

- ✘ The reef, off the north-east coast of the state of Queensland, has faced heavy coral damage in recent years from bleaching and warmer water temperatures as well as coastal development, agricultural and industrial pollution, storms and the starfish.
- ✘ Surveys by the Australian Institute of Marine Science found that coral cover declined by about 50 per cent between 1985 and 2012, and that crown-of-thorns starfish were responsible for almost half of this decline.
- ✘ The reef is also reeling from significant coral bleaching due to warming sea temperatures linked to climate change.
- ✘ Following the heavy coral bleaching in recent years, the number of tourists reduced.

Background:

- ✘ However, the coral-eating starfish are naturally occurring but have proliferated due to pollution and agricultural run-off at the struggling reef.

What is the plan?

- ✘ Most of the funding would be going to supporting farmers stopping runoff off their properties.
- ✘ The plan includes £21 million to prevent pollution from entering the reef, particularly from surrounding farms, as well as £6 million for an “all-out assault on coral-eating crown-of-thorns starfish” and £3.5 million for research into improving the resilience of coral.
- ✘ Funds will also go towards increasing the number of patrol vessels and divers targeting the starfish.

About crown-of-thorns starfish:

The crown-of-thorns starfish is a large, multiple-armed starfish that usually preys upon hard, or stony, coral polyps.

- ✘ The crown-of-thorns starfish receives its name from venomous thorn-like spines that cover its upper surface, resembling the biblical crown of thorns.
- ✘ It is one of the largest starfish in the world.
- ✘ It has a very wide Indo-Pacific distribution.
- ✘ It is perhaps most common in Australia but can occur at tropical and subtropical latitudes from the Red Sea and the east African coast across the Indian Ocean, and across the Pacific Ocean to the west coast of Central America.
- ✘ It occurs where coral reefs or hard coral communities occur in this region.

About Great Barrier Reef:

- ✘ The Great Barrier Reef is the world’s largest coral reef system.
- ✘ It is composed of over 2900 individual reefs and 900 islands.
- ✘ The reef is **located in the Coral Sea, off the coast of Queensland, Australia.**
- ✘ The reef is so vast that it can be seen from outer space.

- ✍ It is also the **world's biggest single structure made by living organisms**. This reef structure is composed of and built by billions of tiny organisms, known as coral polyps.
- ✍ In 1981, it was selected as a **World Heritage Site**.
- ✍ A large part of the reef is protected by the Great Barrier Reef Marine Park, which helps to limit the impact of human use.

Source: The Hindu, Economic Times

First International Dam Safety Conference

Why in news?

The first International Dam Safety Conference-2018 was held in Kovalam, Thiruvananthapuram (Kerala) from January 23-24, 2018.

Key Facts

- ◆ This Conference is organized under aegis of ongoing Dam Rehabilitation and Improvement Project (DRIP).
- ◆ It was organized jointly by Central Water Commission (CWC), Kerala Water Resources Department (KWRD), National Institute of Technology, Calicut (NITC), and College of Engineering, Trivandrum (CET).

Background:

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

About Dam Health and Rehabilitation Monitoring Application (DHARMA)

- ✍ A software programme known as Dam Health and Rehabilitation Monitoring Application (DHARMA) was also launched to document authentic asset and health information pertaining to the large dams in the country.
- ✍ DHARMA is a web tool to help dam owners to digitise all dam-related data effectively, store, monitor and take appropriate actions to ensure need-based rehabilitation.
- ✍ It is a new stride in asset management aspect by India.

About DRIP:

The Ministry of Water Resources (MoWR), Government of India, with assistance from the World Bank, is implementing the Dam Rehabilitation and Improvement Project (DRIP).

- ✍ DRIP is a project involving 9 implementing agencies (IAs) across seven states of India (Kerala, Madhya Pradesh, Orissa, Tamil Nadu, Karnataka, Uttarakhand, and Jharkhand) and targets rehabilitation of about 225 dam projects across the country.
- ✍ The Project is also facilitating the institutional strengthening of the implementing agencies for sustainable dam safety initiatives.
- ✍ The project will also promote new technologies and improve Institutional capacities for dam safety evaluation and implementation at the Central and State levels and in some identified premier academic and research institutes of the country.
- ✍ The Central Dam Safety Organisation of Central Water Commission, assisted by a Consulting firm, is coordinating and supervising the Project implementation.
- ✍ The preparation of Emergency Action Plan (EAP) for all DRIP dams is one of the important activities under DRIP. This document defines clear roles for all concern agencies as well as Standard Operating Protocols during various stage of exigencies, as well as contains all technical details about the flood waves moving downstream affecting the downstream habitation.

The project development objectives of DRIP are:

1. To improve the safety and performance of selected existing dams and associated appurtenances in a sustainable manner, and
2. To strengthen the dam safety institutional setup in participating states as well as at central level.

Source: PIB**Disaster warning system for Odisha by March****Why in news?**

India's first automatic Early Warning Dissemination System (EWDS) will be commissioned by March 2018 in Odisha.

- ◆ The project aims to establish fool-proof communication system to address existing gaps in disseminating disaster warning up to community level.

About Early Warning Dissemination System (EWDS):

- ✎ The EWDS is a first-of-its-kind automatic public address system in the country.
- ✎ The project is being implemented under National Cyclone Risk Mitigation Project with World Bank's help.
- ✎ It will provide Odisha's entire population residing on 480 km length coastline a pre-warning siren in event of occurrence of natural disasters like tsunami or cyclone.
- ✎ It will help to warn vast population of state residing along its coast from State headquarters through loud sirens from towers installed at 122 locations in six coastal districts in event of occurrence of natural disasters like a tsunami or cyclone.

How EWDS Works?

- ✎ The EWDS comprises certain devices inbuilt into it like Satellite-Based Mobile Data Voice Terminals (SBMDVT), Digital Mobile Radio (DMR), Mass Messaging System (MMS) and Universal Communication Interface (UCI) which help in inter-operability among different communication technologies.
- ✎ Whenever, there is slightest hint of disasters like tsunami or cyclone or any other natural calamity, it will broadcast warning to entire state just by press of button from control room in state capital Bhubaneswar.
- ✎ With press of button, loud sirens will go off at same time and warning sound will heard in localities to radius of 1.5 km. With this pre-warning, EWDS will help people to move to safer places before government agencies start evacuation.

Source: The Hindu**India plans automated ocean pollution observation****Why in news?**

India is all set to have its own automated ocean pollution observation system this year.

- ◆ The **new ocean data acquisition system called automated moorings** will be the first of its kind in India.
- ◆ The system will become functional by April this year and the cost of the project is estimated to be at Rs. 100 crore.

Need for such system:

- ✎ There are reports that the water is becoming anoxic and it could change the marine system. Anoxic waters are areas of sea water that are depleted of dissolved oxygen.

What is automated moorings?

- ✎ Automated moorings is an automated ocean pollution observation system which will help keep a tab on ocean pollution levels apart from offering insights on how the marine system is changing.

Advantages of automated moorings:

- ✎ The system will do away with the present practice of collecting water samples from sea and studying their pollution levels thereafter.
- ✎ It will also provide data that will help scientists to understand how the marine system is changing.

Source: Live Mint

13th Raising Day celebrations of National Disaster Response Force (NDRF)**Why in news?**

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

- ◆ On this occasion, an MoU was also signed in between NDRF and National Skill Development Corporation (NSDC).
- ◆ Besides, a co-operation with Facebook took place during the programme. The highlights of the cooperation with Facebook includes targeted geographical messaging, disaster information volunteers and community capacity building.

About NDRF:

- ✎ The Disaster Management (DM) Act has made the statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters.
- ✎ NDRF is a specialised force capable of responding to any type of disaster in the country and abroad. It is strategically deployed across the nation as per the vulnerability profile of the country.

Evolution of NDRF:

- ✎ Two national calamities in quick succession in the form of Orissa Super Cyclone (1999) and Gujarat Earthquake (2001) brought about the realization of the need of having a specialist response mechanism at National Level to effectively respond to disasters. This realization led to the enactment of the DM Act on 26 Dec 2005.
- ✎ The NDRF raised on January 19, 2006.

Role and mandate of NDRF:

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

What are the features which make NDRF a Unique Force?

- ☑ The only dedicated disaster response force of the world.

- ☑ The only agency with comprehensive response capabilities having multi-disciplinary and multi-skilled, high-tech, stand alone nature.
- ☑ Experienced paramilitary personnel specially trained and equipped for disaster response.
- ☑ Capabilities for undertaking disaster response, prevention, mitigation and capacity building.

Source: PIB, ndrfandcd.gov

Over 100 projects to be signed under International Solar Alliance

Why in news?

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

About International Solar Alliance:

ISA was launched, on the sidelines of COP-21, at the UN Climate Change Conference in Paris in November, 2015 by Modi and French President Francois Hollande.

- ✎ The alliance, headquartered in India, aims to bring together countries situated between the Tropics of Cancer and Capricorn which receive abundant sunshine for around 300 days a year.
- ✎ ISA aims to invite solar rich 121 countries located fully or partly between the tropics of Cancer and Capricorn to join the alliance.
- ✎ International Steering Committee was establishment under the mandate of the Paris Declaration of ISA to provide the guidance and direction to establish the ISA.
- ✎ It will function from the Gurgaon, Haryana based **National Institute of Solar Energy (NISE)**.
- ✎ India has offered a contribution of Rs 175 crore for creating ISA corpus fund and for meeting the cost of ISA secretariat for initial five years.
- ✎ Alliance seeks to share common platform to reduce the cost of finance and technology that is needed to deploy solar power widely.
- ✎ Alliance would pursue cooperation in training, building institutions, regulatory issues, common standards, and investment including joint ventures.

About the World Future Energy Summit (WFES):

- ☑ The World Future Energy Summit (WFES) is an **annual event**, dedicated to advancing future energy, energy efficiency and clean technologies.
- ☑ **Located in Abu Dhabi**, WFES is a **business-first exhibition** for project developers, distributors, innovators, investors and purchasers from across the globe to come together and discover new solutions to the world's growing energy challenges.

Source: PIB

Ministry refuses captive breeding of Chiru antelope

Why in news?

The Ministry of Environment and Forests and Climate Change (MoEFCC) has refused to allow captive breeding of Chiru (Tibetan antelope), whose underfur is used for making famous shahtoosh shawls.

- ◆ The suggestion for captive breeding was made by Parliamentary Standing Committee on Science & Technology, Environment & Forests asking to consider captive breeding as it will add to livelihood of people of Kashmir.

Concerns:

- ✎ Chiru for long time have been hunted for their underfur, which is renowned for its quality which is traditionally woven into an extremely fine fabric to make Shahtoosh shawls. It takes three to five hides to make a single shawl.

- ✘ Moreover, the wool cannot be sheared or combed and to collect the fur, the animals have to be killed.

Parliament panel view:

- ✘ The Parliament panel was of view that MoEFCC should conserve and breed Chiru goat, which can then be given to shawl makers for collecting hair.
- ✘ This would increase number of these goats but would also add to sustainable livelihood opportunities of people of Kashmir, who are lot dependant on the handicraft of embroidered shawls.
- ✘ It also cited that China and Mongolia are breeding Chiru goats for its wool, which is very expensive. The cost of an embroidered shahtoosh shawl can run into crores of rupees.

Why the government is not in favour of captive breeding of Chiru?

- ✘ Chiru is assessed as 'Near Threatened' by the International Union for Conservation of Nature (IUCN) 2017. Their current low population can only be maintained with continued high levels of protection in its natural. Any relaxation in protection regime of animal will lead to rapid population decline due to commercial poaching.
- ✘ Chiru inhabits high-altitude Tibetan plateau and requires large expanse of land for its movement and ranging patterns to fulfil its feeding and breeding requirements. Rearing it in captivity is extremely difficult.
- ✘ Besides, any attempt to do conservation breeding at very high altitude regions of Ladakh may not be economical or feasible as humans cannot be posted there continuously for more than 2-3 months.
- ✘ Moreover, Chinese also have failed to keep Chiru in captivity due to its poor survival rates.

About Tibetan antelope (chiru):

- ☑ Tibetan antelope (chiru) is a medium-sized bovid native to the Tibetan plateau.
- ☑ It is classified as **"near threatened" under the IUCN's red list.**



- ☑ In recent years, they have become endangered due to poaching. Fewer than 75,000 individuals are left in the wild.
- ☑ They are hunted for their soft and warm wool which is usually obtained after death. This wool is known as **shahtoosh** and is used to weave shawls.
- ☑ The shahtoosh trade was banned globally in 1975 under the Convention on International Trade in Endangered Species (CITES) to which India is a signatory.
- ☑ Chiru is listed under Schedule- I of the India's Wildlife (Protection) Act, granting it the highest level of protection.
- ☑ They are found almost entirely in China, where they inhabit Tibet, southern Xinjiang, and western Qinghai; **a few are also found across the border in Ladakh, India.** Today, the majority are found within the Chang Tang Nature Reserve of northern Tibet.

Source: The Hindu, Indian Express, Live Mint

5th World Energy and Environment Conference and Exhibition

Why in news?

- ◆ The World Energy and Environment Council (WEEC) is organising the 5th Series World Energy and Environment Conference and Exhibition 2018 at Bahrain.
- ◆ The Conference raises and sets the bar higher for global debate, dialogue, engagement and cooperation.
- ◆ Theme: “Shifting to Clean, Renewable Energy in Time of Transition”.

About World Energy and Environment Council (WEEC):

- ☑ WEEC is a world platform that address serious issues about environment and the challenges to turn to clean, renewable energy.
- ☑ The focus is into the development of energy policy, sustainable strategies, sustainable resource developments and sustainable economic development.
- ☑ WEEC aim for commitment from governments, its leaders, for lawmakers to do intelligent thinking, get brilliant ideas in directing laws and regulations.
- ☑ With the private sectors cooperation and participation, creating a roadmap toward sustainability for the benefit of all.

Source: Economic Times

Plastic microbeads ban enters force in UK

Why in news?

A UK-wide ban on the manufacture of products containing microbeads has come into force on 9 January.

- ◆ With this, manufacturers can no longer add tiny pieces of plastic to wash-off cosmetic and personal care products (such as exfoliating scrubs, shower gels and toothpaste).
- ◆ However, this isn't a complete ban – ‘leave-on’ products (such as sunscreen and makeup) will still be allowed to contain microbeads following the cosmetic industry's resistance.

What are ‘Microplastics’ or Microbeads?

- ✎ Microplastics are plastic pieces or fibres measuring less than five millimetres. The microplastics or microbeads found in personal care products are always smaller than one millimetre.
- ✎ According to recent United Nations reports, these are dangerous for the aquatic life and environment.

What are microplastics or microbeads made of?

- ✎ Microplastics or microbeads used in personal care products are mainly made of polyethylene (PE), but can be also be made of polypropylene (PP), polyethylene terephthalate (PET), polymethyl methacrylate (PMMA) and nylon.

Its usage:

- ✎ They are widely used in cosmetics as exfoliating agents and in personal care products such as toothpaste, as well as in biomedical and health science research.
- ✎ In simple words, these microbeads are so small that a person can barely feel them.
- ✎ Their roundness and particle size create a ball-bearing effects in creams and lotions, resulting in a silky texture and spread ability.

Why is it used for?

- ✎ Microbeads have been used to replace natural exfoliating materials.
- ✎ Their usage becoming more rampant because of their microspheres in different colours add visual appeal to cosmetic products.

Why they are harmful?

- ✎ Microbeads- largely non-biodegradable- flow through sewer systems and end up in seas and oceans, where they contribute to the huge chunk of plastic soup in the environment.
- ✎ Microbeads are also likely to be transported to wastewater treatment plants. Due to their small size, substantial portion passes through filtration system and enters aquatic environment.

Banned by various countries:

- ✎ The United States passed the Microbead-Free Waters Act of 2015, which required companies to stop using microbeads in beauty and health products by July 2017, and Canada's ban on manufacturing the pellets took effect at the beginning of this year.
- ✎ New Zealand's ban on microbeads is to take effect in June.
- ✎ Several countries in the European Union have campaigned for a similar ban.

Need for ban:

- ✎ Due to the unregulated production and usage of plastics in microbeads in various cosmetic products available in the market and the excessive usage of such products by the end users is leading to water pollution across the globe.
- ✎ Besides, after being washed down the drain, microbeads flow through sewer systems around the world before making their way into rivers and canals and ultimately, straight into the seas and oceans, where they contribute to the huge chunk of plastic soup in the environment.

Source: The Hindu, Times of India

NASA sees first direct proof of ozone hole recovery**Why in news?**

The National Aeronautics and Space Administration (NASA) has confirmed that the hole in the ozone layer has shrunk thanks to the ban of CFCs.

- ◆ It was confirmed after finding that chlorine levels are rapidly declining in the Earth's stratosphere.

Background:

- ◆ A year ago, satellite pictures demonstrated that the opening had started to close and could be totally recuperated by 2060. But it was not clear whether the closure was a direct result of the Montreal Protocol, which was signed by all countries of the world in 1985, phasing out chlorofluorocarbons (CFCs).
- ◆ Presently long-term satellite observations by Nasa have shown a 20% decrease in levels of chlorine in the Earth's atmosphere since 2005, proving for the first time that the worldwide action is having a dramatic impact on the planet.

What is the ozone layer?

- ✎ The ozone layer is a deep layer in the stratosphere, encircling the Earth, that has large amounts of ozone in it.
- ✎ The layer shields the entire Earth from much of the harmful ultraviolet radiation that comes from the sun.
- ✎ The ozone layer exists mainly in the stratosphere, a layer of the atmosphere that reaches from 10 to 50 kilometers (about 6 to 30 miles) above the Earth's surface.

About UV-B and UV-A radiation:

- ✎ UV-B radiation (280- to 315- nanometer (nm) wavelength) from the Sun is partially absorbed in ozone layer. As a result, the amount of UV-B reaching Earth's surface is greatly reduced.
- ✎ UV-A (315- to 400-nm wavelength) and other solar radiation are **not strongly absorbed by the ozone layer.**

- ✎ Human exposure to UV-B increases the risk of skin cancer, cataracts, and a suppressed immune system. UV-B exposure can also damage terrestrial plant life, single cell organisms, and aquatic ecosystems.

What is the ozone hole?

- ✎ The “ozone hole” occurs over Antarctica in the very early spring when weather conditions and a lack of sunlight which produces ozone cause the stratospheric ozone layer in this region to become very thin (very little ozone).

Depletion of ozone is due to many factors, the most dominant of which is the release of chlorine from CFCs (Chlorofluorocarbons) which destroys the ozone.

How ozone hole develops?

- ✎ An atmospheric circulation pattern known as the “**circumpolar vortex**” builds over Antarctica in the winter, due to the very cold air mass that forms there. This vortex prevents stratospheric air from lower latitudes, which contains much more ozone, from penetrating into the atmosphere over Antarctica. At the same time, the long winter night deprives the air in the vortex of sunlight, which is necessary to produce stratospheric ozone. The result is that very low levels of ozone occur during September and October.

What are CFCs?

Chlorofluorocarbons, or CFCs, are compounds made up of combinations of the elements chlorine, fluorine and carbon; aerosols, refrigerants and foams contain CFCs.

- ✎ When these CFCs enter the air, they rise up into the atmosphere to meet up with and destroy ozone molecules.
- ✎ Some of the better-known CFCs are the Freon compounds, which were used as cooling ingredients in refrigerators and air conditioners.
- ✎ CFCs have lifetimes from 50 to 100 years, so they linger in the atmosphere for a very long time.
- ✎ CFCs are not flammable; therefore they were used as propellants that would push other molecules out of the aerosol sprays.
- ✎ For the same reason CFCs were used to form foamed plastics.
- ✎ Also low flammability enabled people to use these molecules to dry clean hot electronic components of devices such as air conditioning.
- ✎ Emissions of CFCs to date have accounted for roughly 80% of total stratospheric depletion.

How do CFCs Destroy the Ozone Layer?

Whilst chlorine is a natural threat to ozone, CFCs which contain chlorine are a man-made problem.

- ✎ Although CFC molecules are several times heavier than air, winds mix the atmosphere to altitudes far above the top of the stratosphere much faster than molecules can settle according to their weight.
- ✎ CFCs are insoluble in water and relatively unreactive in the lower atmosphere but are quickly mixed and reach the stratosphere regardless of their weight. When UV radiation hits a CFC molecule it causes one chlorine atom to break away.
- ✎ The chlorine atom then hits an ozone molecule consisting of three oxygen atoms and takes one of the oxygen molecules, destroying the ozone molecule and turning it into oxygen.
- ✎ When an oxygen molecule hits the molecule of chlorine monoxide, the two oxygen atoms join and form an oxygen molecule.
- ✎ When this happens, the chlorine atom is free and can continue to destroy ozone. Naturally occurring chlorine has the same effect in the ozone layer, but has a shorter life span.

Source: The Hindu

Flamingo festival at Pulicat Lake

Why in news?

The three-day annual Flamingo Festival was recently held at Pulicat lake and Nelapattu Bird Sanctuary in Sullurpet mandal.

About Flamingo Festival:

- ◆ Flamingo Festival is held every year to promote tourism in Pulicat and Nellapattu.
- ◆ Flamingo Festival is being organised for the past 12 years. Migratory birds from Siberia have visit this place during winter season for breeding.
- ◆ Somewhere between 9,000 to 12,000 migratory birds arrive at Pulicat region for breeding this season.
- ◆ Usually around 80 different avian species migrate to Pulicat for breeding.
- ◆ They hunt in shallow waters of lake and breed there. Once the breeding season concludes, they fly away to their native land with their offspring in tow.

About Nelapattu Bird Sanctuary:

- ✎ Nelapattu Bird Sanctuary is one of the biggest habitats for some hundreds of **pelicans** and other birds.
- ✎ It is located about 20 km north of the Pulicat Lake on the Andhra Pradesh-Tamil Nadu border.
- ✎ This sanctuary spread in an area about 459 hectares and plays important role in nesting of various birds especially migratory birds.

About Pulicat Lake:

- ☑ Pulicat Lake is the **second largest brackish water lake or lagoon in India, after Chilika Lake.**
- ☑ It straddles the border of Andhra Pradesh and Tamil Nadu states with over 96% of it in Andhra Pradesh and 4% in Tamil Nadu situated on the Coromandal Coast in South India.
- ☑ The barrier island of Sriharikota separates the lake from the Bay of Bengal and is home to the **Satish Dhawan Space Centre.**
- ☑ The **Buckingham Canal**, a navigation channel, is part of the lagoon on its western side.
- ☑ Two rivers which feed the lagoon are the **Arani river** at the southern tip and the **Kalangi River** from the northwest, in addition to some smaller streams.
- ☑ The lake encompasses the **Pulicat Lake Bird Sanctuary.**
- ☑ Pulicat Lake Bird Sanctuary and Nelapattu Bird Sanctuary are two most popular bird sanctuaries in South India and an important breeding site for spot billed pelicans in India and noted for the many greater flamingos.

Source: The Hindu

Cyclone bomb hits United States; east coast worst affected

A bomb cyclone walloped the US East Coast with heavy snow and freezing cold that made for treacherous travel conditions and bone-chilling misery.

What is Bomb Cyclone?

Bomb Cyclone is a nickname given to a phenomenon called “bombogenesis,” in which a weather system experiences a sharp drop in atmospheric pressure and intensifies rapidly, unleashing hurricane-force winds.

- ◆ By definition, the barometric pressure must drop by at least 24 millibars in 24 hours for a storm to be called a bomb cyclone; the formation of such a storm is called bombogenesis.
- ◆ What makes a storm a “bomb” is how fast the atmospheric pressure falls; falling atmospheric pressure is a characteristic of all storms.

- ◆ These strong winter systems are notorious for packing big winds and waves to go along with heavy snow – possibly resulting in downed trees, power outages and coastal flooding.
- ◆ It happens after the pressure inside a storm cell falls so quickly that it gives the storm explosive strength.

Mechanism of Bomb Cyclone:

- ✎ Deep drops in barometric pressure occur when a region of warm air meets one of cold air. The air starts to move and the rotation of the earth creates a cyclonic effect.
- ✎ The direction is counter-clockwise in the Northern hemisphere leading to winds that come out of the northeast.

Hurricanes vs. cyclones vs. typhoons:

Hurricanes, cyclones and typhoons are all tropical storms. They are all the same thing but are given different names depending on where they appear. When they reach populated areas they usually bring very strong wind and rain which can cause a lot of damage.

- ☑ Hurricanes are tropical storms that form over the North Atlantic Ocean and Northeast Pacific.
- ☑ Cyclones are formed over the South Pacific and Indian Ocean.
- ☑ Typhoons are formed over the Northwest Pacific Ocean.

Source: Indian Express

New species of blind fish discovered inside Meghalaya cave

Why in news?

A new species of blind fish – Schistura larketensis has been discovered inside a cave in East Jaintia Hills district of Meghalaya.

- ◆ The fish — Schistura larketensis — gets its name from Larket village, where the cave has been found.

About the new species:

- ◆ The species has apparently lost its sight living in the perpetual darkness inside the cave.
- ◆ It has also lost its pigments too while adapting to its habitat in the dark waters.
- ◆ The orbital diameter of fish decreases gradually as its matures with eyes completely absent in older individuals.
- ◆ Small and faintly blackish spot-like depressions are seen in place of eyes, indicating evolutionary and morphological adaptations.
- ◆ The new fish species can be immediately distinguished from all other species of Schistura (excluding Schistura papulifera for its vestigial subcutaneous eyes appearing as black spots).

Threats to this species:

- ✎ The high level of siltation, pollution and acidification in Jaintia Hills due to coal mining and cement plants is threatening local cave biodiversity.

Significance of this discovery:

- ✎ Though there are about 200 known species of similar kind of fish inhabiting streams and rivers throughout Indochina and Southeast Asia, this is first such discovery of blind fish.

Source: The Hindu

9th High Powered Review Board meeting of Brahmaputra Board held

Why in news?

The 9th meeting of High Powered Review Board (HPRB) of Brahmaputra Board was held recently at Borgos, Kaziranga in Assam.

- ◆ The meeting was chaired by Nitin Gadkari, Union Minister for Water Resources, River Development and Ganga Rejuvenation.

Decisions taken at the 9th HPRB:

- ◆ HPRB approved restructuring of Brahmaputra Board and advised that funds should be largely spent for works and limited funds should be spent for establishment costs including salary and wages.
- ◆ HPRB also ratified the project for protection of Majuli Island from flood and erosion for an amount of Rs. 237 crore.
- ◆ A Mathematical Model Study prepared by IIT, Guwahati called Brahma-ID was also launched on this occasion. This project has been sponsored by Brahmaputra Board for an amount of Rs. 3.00 crore.

About Brahmaputra Board:

The Brahmaputra Board is **an autonomous statutory body which is responsible for preparation and implementation of plans related to flood management, erosion control, drainage management and water resource development in the Brahmaputra valley.**

- ✎ The board was set up under the Ministry of Irrigation (later renamed as Ministry of Water Resources) as per the Brahmaputra Board Act 1980.
- ✎ The Board started functioning from January 11, 1982 and its headquarters is located at Guwahati, Assam.

Objectives of the board:

- ✎ The key objectives of Brahmaputra board include preparation and implementation of Master Plans for management of flood, bank erosion and drainage congestion and development and utilization of water resources of the Brahmaputra Valley in association with States.

Composition of the board:

- ✎ The Board consists of 21 Members (4 full time Members and 17 part time Members), representing seven states of the North Eastern Region, North Eastern Council, concerned Ministries and Departments of the Government of India.
- ✎ Since creation of Ministry of Development of North Eastern Region (DoNER) and inclusion of Sikkim and part of West Bengal within the jurisdiction of Board, some other representatives of various concerned departments or bodies are also invited as Special Invitees in the meetings of the Brahmaputra Board.

Funding of the board:

- ✎ Brahmaputra Board is provided fund through grant-in-aid by the Central Government for its works and establishments.

Jurisdiction of the board:

- ✎ The jurisdiction of the Board includes both the Brahmaputra and Barak Valley and covers all the States of the North Eastern Region, Sikkim and part of West Bengal falling under Brahmaputra river basin.

Main functions of the board:

- ✎ Undertaking 'Survey & Investigation' in Brahmaputra & Barak Valley and preparation of Master Plans for control of floods, bank erosion and improvement of drainage in the Brahmaputra

Valley and activities connected therewith, including development and utilization of water resources of the Brahmaputra Valley for irrigation, hydropower, navigation and other beneficial purposes,

- ✎ Preparation of Detailed Project Reports and estimates including apportionment of cost among States in respect of the dams and other projects,
- ✎ Formulation of programme, in consultation with State Governments, for construction / implementation of dams and other projects identified in the Master Plans, approved by Government of India, in phases,
- ✎ Finalization of standards and specifications for construction, operation and maintenance of such dams and other projects and
- ✎ Construction, operation and maintenance of Multipurpose and other Water Resources Projects, identified in the Master Plans, on approval of Government of India.

About Barak Valley:

- ☑ The **river Barak is a part of the Ganga-Brahmaputra Meghna system** and is the **second largest river of the N.E. Region** having eight major tributaries.
- ☑ It **originates from a hill east of Mouthana** at an elevation of about 2840 m in the southern slopes of Nagaland/Manipur.
- ☑ The **Barail, Patkai and Lussai hills** bound the sub-basin on its three sides.
- ☑ The total catchment area of the Barak sub-basin up to Indo-Bangladesh border is 41,704 sq.km. Out of which **751 sq.km. lies in Myanmar.**
- ☑ After Bhanga in Cachar district (Assam) the Barak bifurcates into **two branches known as the Surma and the Kushiara.** These two branches enter Bangladesh and again join to form a single river channel and flow up to Bhairab Bazar where it **meets with Meghna in Bangladesh.**
- ☑ The river Barak is joined by a number of hill streams on both its banks. The flood occurs frequently in this valley causing extensive damage to lives and properties.

Source: PIB



Science & Technology, Defence & Health

Confirmation of H5 Avian Influenza in Dasarahalli Village, Bengaluru

Why in news?

An outbreak of H5 Avian Influenza has been reported from Dasarahalli village, Bengaluru East Taluk, Bengaluru Urban District in Karnataka.

- ◆ The samples from the said epicenter (a poultry meat shop) were sent to the **National Institute of High Security Animal Diseases (NIHSAD), Bhopal** which confirmed that the samples were found positive for H5 strain of Avian Influenza virus.
- ◆ On the directions of the Centre, the Karnataka Government has notified the outbreak and initiated the control and containment operations.
- ◆ A central team of Department of Animal Husbandry, Dairying & Fisheries comprising of two experts has been deputed to Bengaluru for overseeing the operation and to assist the State Government.

What is Avian influenza?

- ✂ Avian influenza (AI), commonly called bird flu, is an infectious viral disease of birds.

Effects of Avian influenza:

- ✂ Outbreaks of AI in poultry may raise global public health concerns due to their effect on poultry populations, their potential to cause serious disease in people, and their pandemic potential.
- ✂ Reports of highly pathogenic AI epidemics in poultry, such as A(H5N1), can seriously impact local and global economies and international trade.

What is H5N1?

- ✂ Most avian influenza viruses do not infect humans. However, some, such as A(H5N1) and A(H7N9), have caused serious infections in people.
- ✂ H5N1 is a type of influenza virus that causes a highly infectious, severe respiratory disease in birds called avian influenza (or “bird flu”).
- ✂ Human cases of H5N1 avian influenza occur occasionally, but it is difficult to transmit the infection from person to person. When people do become infected, the mortality rate is about 60%.

How does H5N1 influenza spread to people?

- ✂ Almost all cases of H5N1 infection in people have been associated with close contact with infected live or dead birds, or H5N1-contaminated environments.
- ✂ The virus does not infect humans easily, and spread from person to person appears to be unusual.
- ✂ There is no evidence that the disease can be spread to people through properly prepared and thoroughly cooked food.

Why is there so much concern about H5N1 influenza?

- ✎ H5N1 infection in humans can cause severe disease and has a high mortality rate.
- ✎ If the H5N1 virus were to change and become easily transmissible from person to person while retaining its capacity to cause severe disease, the consequences for public health could be very serious.

Prevention:

- ✎ Controlling the disease in animals is the first step in decreasing risks to humans.

About National Institute of High Security Animal Diseases (NIHSAD):

- ✎ Came into existence in 2014, the National Institute of High Security Animal Diseases (NIHSAD) of **Indian Council of Agricultural Research (ICAR)** is a premier institute of India for research on exotic and emerging pathogens of animals.
- ✎ The institute has contributed significantly by detecting many animal diseases of exotic origin and preventing them from entering our country.

Source: PIB, The Hindu**Ethereum Joins \$1,000 Club****Why in news?**

Ethereum has hit \$1,000 for the first time, while investors eye at alternative currencies such as ripple, ethereum and litecoin besides bitcoin.

Key Facts

- ◆ Earlier Ethereum was the second-most valued currency after bitcoin, but now ripple has outpaced it lately.
- ◆ The market capitalization of ripple is \$121 billion while ethereum's market cap is little less than \$100 billion.
- ◆ Bitcoin, the big daddy of cryptocurrency, still rules the world of digital currencies with a whopping market cap of \$280 billion.

What is Ethereum?

- ◆ At its simplest, Ethereum is an open software platform based on blockchain technology that enables developers to build and deploy decentralized applications.
- ◆ **The value token of the Ethereum blockchain is called ether.**

Is Ethereum similar to Bitcoin?

- ✎ Like Bitcoin, Ethereum is a **distributed public blockchain network**. Although there are some significant technical differences between the two, the most important distinction to note is that Bitcoin and Ethereum differ substantially in purpose and capability.
- ✎ Unlike most blockchains, Ethereum has an added component that's particularly attractive to enterprise clients: smart contracts. These protocols help to verify, facilitate, or enforce the negotiation of a contract in an efficient and secure manner.

Benefits of Ethereum decentralized Platform:

Because decentralized applications run on the blockchain, they benefit from all of its properties.

- ✎ **Immutability** – A third party cannot make any changes to data.
- ✎ **Corruption & tamper proof** – Apps are based on a network formed around the principle of consensus, making censorship impossible.
- ✎ **Secure** – With no central point of failure and secured using cryptography, applications are well protected against hacking attacks and fraudulent activities.
- ✎ **Zero downtime** – Apps never go down and can never be switched off.

Downside of Ethereum decentralized Platform:

- ✎ Because smart contract code is written by humans, smart contracts are only as good as the people who write them. Code bugs or oversights can lead to unintended adverse actions being taken.
- ✎ If a mistake in the code gets exploited, there is no efficient way in which an attack or exploitation can be stopped other than obtaining a network consensus and rewriting the underlying code. This goes against the essence of the blockchain which is meant to be immutable.
- ✎ Also, any action taken by a central party raises serious questions about the decentralized nature of an application.

What is blockchain technology?

- ✎ At a very high level, the blockchain is a decentralized ledger, or list, of all transactions across a peer-to-peer network.
- ✎ This is the technology underlying Bitcoin and other cryptocurrencies, and it has the potential to disrupt a wide variety of business processes.

Applications of blockchain technology:

- ☑ Using this technology, participants can transfer value across the Internet without the need for a central third party. The buyer and seller interact directly without needing verification by a trusted third-party intermediary.
- ☑ Transactions are not anonymous, but they are pseudonymous: a transaction record is created, but identifying information is encrypted, and no personal information is shared.

Source: Economic Times

Defence Ministry approves projects worth Rs2420 crore for Navy, Army**Why in news?**

The Union Ministry of Defence (MoD) has approved procurement of P-8I Training Solution for Indian Navy and Low Intensity Conflict Electronic Warfare System (LICEWS) for Indian Army at total cost of Rs 2419.32 crore.

About P-8I Training Solution

- ◆ The P-8I Training Solution will be brought from Boeing for Rs.1949.32 crore.
- ◆ This training solution accurately simulates P-8I aircraft and mission systems. It will help Indian Navy realistically train and rehearse for sophisticated missions involving P-8I aircraft, at fraction of the cost of live aircraft training.
- ◆ The P-8I aircraft manufactured by Boeing is equipped for long range anti-submarine warfare, anti-surface warfare, surveillance, intelligence and reconnaissance in support of broad area, maritime and littoral operations.
- ◆ It is capable of instant punitive response and maintaining watch over India's immediate and extended areas of interest.

About Low Intensity Conflict Electronic Warfare System (LICEWS):

- ✎ This system will be procured from Bharat Electronics Limited for Rs. 470 crore.
- ✎ It will equip Indian Army with upgraded communications infrastructure that will help forces to effectively deal with advanced communications systems being used by terrorist groups.

Background:

- ✎ The first P-8I aircraft was inducted in Indian Navy in 2013. As of date, 8 aircraft based at INS Rajali in Tamil Nadu have been fully integrated into Indian Naval operations. In 2016, MoD placed follow-on order for 4 additional P-8I and their delivery will begin in 2020.

Source: PIB, The Hindu

Kerala's fight against Antimicrobial Resistance

Why in news?

With antimicrobial resistance (AMR) emerging as a major concern in the health as well as allied sectors such as veterinary, dairy, fisheries and poultry, Kerala is all set to launch its strategic action plan for tackling AMR.

- ◆ The draft AMR action plan of the State is in the process of being finalised and implemented.

Why Kerala needs a strategic action plan?

- ✎ The AMR surveillance data, from seven tertiary care centres in the state, have reported that resistance to Colistin, the last-mile antibiotic available to treat pan-drug resistant *Klebsiella pneumoniae* strains, is a reality in most government medical college hospitals in the State.
- ✎ Besides, AMR surveillance in the State is currently restricted to the sample studies done in tertiary care hospitals but this hardly reflects the situation in the community.

The draft focuses on 5 strategies:

- ✎ Improving awareness and understanding of the public on AMR.
- ✎ Strengthening knowledge through evidence, AMR surveillance.
- ✎ Implementation of better infection prevention, control strategies.
- ✎ Optimising use of antimicrobial agents in all sectors including health, agriculture, dairy, poultry and fisheries.
- ✎ Promoting collaborative research studies on drug resistance in health, allied sectors.

What is Antimicrobial resistance or Superbugs?

- ✎ Antimicrobial resistance (AMR) or superbugs happens when microorganisms such as viruses, bacteria, fungi and parasites change when they are exposed to antimicrobial drugs. These microorganisms are also termed as "superbugs".
- ✎ As a result, the medicines or drugs become ineffective and infections persist in the body further increasing the risk of spread to others.

Dangers of AMR:

- ✎ AMR causes a reduction in the effectiveness of medicines, making infections and diseases difficult or impossible to treat.
- ✎ AMR is associated with/ increased mortality, prolonged illnesses in people and animals, production losses in agriculture, livestock and aquaculture. This threatens global health, livelihoods and food security.
- ✎ AMR also increases the cost of treatments and care.

National Action Plan to combat Antimicrobial Resistance:

- ✎ Union Minister of Health and Family Welfare announced the finalization of India's comprehensive and multi-sectoral National Action Plan at the 'Inter-Ministerial Consultation on AMR containment' held at New Delhi.
- ✎ The Ministers signed a '**Delhi Declaration**' to contain Antimicrobial Resistance (AMR).
- ✎ The Delhi Declaration calls for the support of all stakeholders including UN, WHO, FAO and other UN agencies, civil society organizations etc., in developing and implementing the national and state action plans on AMR.
- ✎ The National action plan has objectives of enhancing awareness, strengthening surveillance, improving rational use of antibiotics, reducing infections and promoting research.

Objectives:

The National Programme for Containment of AMR is under implementation in 12th Five Year Plan with the following objectives:

- ☑ To establish a laboratory-based surveillance system by strengthening laboratories.
- ☑ To generate quality data on AMR for pathogens of public health importance.
- ☑ To generate awareness among healthcare providers and in the community regarding the rational use of antibiotics.
- ☑ To strengthen infection control guidelines and practices and promote rational use of antibiotics.

Source: The Hindu

BharatNet Phase 1: Target Achieved**Why in news?**

Government has achieved a significant milestone under the BharatNet by completing Phase-1 of the project by connecting over one lakh Gram Panchayats (GP) across the country with high speed optical fibre network as per the declared deadline of 31 Dec 2017.

- ◆ BharatNet network built under Phase 1 envisages delivery of high-speed broadband services in over 2.5 lakh villages benefitting more than 200 million rural Indians.

What is BharatNet?

BharatNet is Centre's rural internet connectivity programme which is implemented by Bharat Broadband Network Limited (BBNL).

- ✎ It is world's largest rural broadband connectivity programme using Optical fibre.
- ✎ Bharat Net seeks to connect all of India's households, particularly the rural areas, through demand, affordable broadband connectivity of 2 Mbps to 20 Mbps to realise the vision of Digital India.
- ✎ The project is being funded by Universal Service Obligation Fund (USOF).

About the Universal Service Obligation Fund (USOF):

- ✎ USOF was formed by the Central Government to help fund projects to boost connectivity in rural areas.
- ✎ Established in 2002, it is headed by the USOF Administrator who reports to the Secretary, Department of Telecommunications (DoT).
- ✎ The money for this fund comes through a 'Universal Access Levy,' charged from the telecom operators on their Adjusted Gross Revenue (AGR) which are then deposited into the Consolidated Fund of India, and require prior parliamentary approval to be dispatched.
- ✎ The USOF works through a bidding process, where funds are given to the enterprise quoting the lowest bid. However, the funds for National Optic Fibre Network (NOFN) were made an exception to this process since Bharat Broadband Nigam Limited (BBNL) was the sole party involved in the implementation having being specifically created for it.

Source: PIB

Free treatment for Hepatitis C in new scheme to be launched this year**Why in news?**

The Union Ministry of Health and Family Welfare is going to roll out National Programme for Control of Viral Hepatitis, a new scheme free treatment of Hepatitis C from the 2018-19 financial year.

What is Hepatitis?

- ◆ Hepatitis is an inflammation of the liver. It may be caused by drugs, alcohol use, or certain medical conditions. But in most cases, it's caused by a virus. This is known as viral hepatitis
- ◆ Scientists have identified 5 unique hepatitis viruses, identified by the letters A, B, C, D, and E. While all cause liver disease, they vary in important ways.

Hepatitis C:

Hepatitis C is an infectious disease caused by the hepatitis C virus (HCV) that primarily affects the liver.

- ✎ During the initial infection people often have mild or no symptoms. Occasionally a fever, dark urine, abdominal pain, and yellow tinged skin occurs.
- ✎ The virus persists in the liver in about 75% to 85% of those initially infected.
- ✎ Early on chronic infection typically has no symptoms. Over many years however, it often leads to liver disease and occasionally cirrhosis.
- ✎ There is no vaccine for HCV.

Hepatitis C: How Does It Spread?

- ✎ It spreads through infected blood. In the U.S., sharing needles or other items used to inject drugs is the most common cause of infection.
- ✎ Getting a tattoo or body piercing with an infected needle is another means of exposure.
- ✎ A mother may pass the virus to her child at birth. In rare cases, unprotected sex spreads hepatitis C, but the risk appears small.
- Having multiple sex partners, HIV, or rough sex seems to raise risk for spreading hepatitis C.

What is the difference between Hepatitis A, Hepatitis B, and Hepatitis C?

Hepatitis A, Hepatitis B, and Hepatitis C are diseases caused by three different viruses. Although each can cause similar symptoms, they have different modes of transmission and can affect the liver differently.

- ☑ Hepatitis A appears only as an acute or newly occurring infection and does not become chronic. People with Hepatitis A usually improve without treatment.
- ☑ Hepatitis B and Hepatitis C can also begin as acute infections, but in some people, the virus remains in the body, resulting in chronic disease and long-term liver problems.
- ☑ There are vaccines to prevent Hepatitis A and B; however, there is not one for Hepatitis C.
- ☑ If a person has had one type of viral hepatitis in the past, it is still possible to get the other types.

Source: Indian Express, Business Standard

Supreme Court sets aside order cancelling larger tobacco health warnings**Why in news?**

The Supreme Court has stayed Karnataka High Court order reducing size of pictorial warnings on packages of tobacco products to 40% of the package space from earlier 85%.

- ◆ The apex court took decision saying that health of citizen has primacy and emphasised on importance of public health and harmful effects of tobacco products.

Significance of this move:

- ✎ The court's decision comes as a relief for health advocates and central health ministry who say bigger health warnings deter tobacco consumption. More than 900,000 people die each year in India due to tobacco-related illnesses, the government estimates.

Background:

- ✎ The Union Ministry of Health and Family Welfare (MoHFW) in 2014 had amended Cigarette and other Tobacco Products (Packaging and Labelling) Rules prescribing mandatory 85% statutory warnings space on both sides of tobacco packaging telling consumers that cigarette smoking and tobacco chewing were harmful to health.
- ✎ These rules were framed under Cigarette and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003.

What was the Karnataka High Court's judgment?

- ☑ In December 2017, Karnataka High Court judgment had quashed MoHFW rules that mandated pictorial health warnings to cover 85% of tobacco product packaging space, holding that they violated Constitutional norms.
- ☑ However, it made it clear that 40% pictorial health warning rule, which existed prior to amendment rules, will remain in force.
- ☑ It had held that rules framed by MoHW in 2014 was violation of the Article 77 (Conduct of Business of Government of India) and Transaction of Business (ToB) rules framed under it as subject of tobacco control and legislation was not attached to one department or Ministry.
- ☑ Moreover, these rules are also contrary to Article 19(1)(g) (right to practise any profession, or to carry on any occupation, trade or business).

Source: The Hindu

India unveils Pratyush, its fastest supercomputer yet**Why in news?**

India's fastest and first multi-petaflops (PF) supercomputer named Pratyush (meaning Sun) was unveiled at Pune-based Indian Institute of Tropical Meteorology (IITM).

Key Facts:

Supercomputer Pratyush will be national facility for improving weather and climate forecasts and services under umbrella of the Ministry of Earth Sciences (MoES).

- ◆ Pratyush has 6.8 PF computational power installed at two MoES Institutes. 4.0 Peta Flops HPC facility at IITM, Pune and 2.8 Peta Flops facility at NCMRWF, Noida. (PF is a measure of a computer's processing speed).
- ◆ Pratyush is fourth fastest supercomputer in world dedicated for weather and climate research. It follows supercomputing machines in Japan, US and United Kingdom.
- ◆ It will improve rankings of Indian supercomputer from 300s to 30s in Top500 list, a respected international tracker of the world's fastest supercomputers.
- ◆ India had till now occupied the eighth position with a capacity of 1 Petaflop. With the new system, it has now jumped over Korea (4.8 Petaflop), France (4.4 Petaflop) and China (2.6 Petaflop).

Potential applications of Pratyush:

- ☑ It will help India with better forecasts in terms of monsoon, extreme events, cyclones, tsunamis, earthquakes, air quality, lightning, fishing, hot and cold waves, flood and drought among others.
- ☑ It will also help those dependent on agriculture, hydrology and power sectors.

Source: The Hindu

SpaceX launches secretive Zuma mission

Why in news?

Private spaceflight company SpaceX launched the secret Zuma Mission for the United States government.

- ◆ SpaceX Falcon 9 rocket launched the secret Zuma spacecraft from the Cape Canaveral Air Force Station in Florida.

About Zuma mission:

- ✍ Zuma mission is a secret mission in its nature or purpose and the agency behind it remains a mystery.
- ✍ It has been manufactured by Northrup Grumman, Virginia-based aerospace and defence company.
- ✍ The only thing that remains known to this mission is that it is for the US government and will be delivered to low-Earth orbit.

About SpaceX:

- ✍ SpaceX (Space Exploration Technologies Corporation) is aerospace manufacturer and space transport services company headquartered in California, US.
- ✍ It was founded in 2002 by Internet tycoon Elon Musk, CEO of Tesla Motors and former PayPal entrepreneur with the goal of creating the technologies to reduce space transportation costs and enable colonization of Mars.

Source: The Hindu

High Risk Pregnancy portal launched

Why in news?

Haryana become first state in the country to launch High-Risk Pregnancy (HRP) portal.

- ◆ It has been launched as part of the High Risk Pregnancy Policy of state implemented since November 2017.
- ◆ The Union ministry of health and family welfare and NITI Aayog have acknowledged the portal as a good practice to be implemented.

About High-Risk Pregnancy (HRP) portal:

- ✍ The portal will help in early identification of high-risk pregnant cases up to grass-roots level and ensures their timely referral to civil hospitals for further management and delivery by specialists.
- ✍ It will help in increasing pace of decline in Maternal Mortality Rate (MMR), Infant Mortality Rate (IMR) and Still Birth Incidence as morbidity and mortality is quite high in high risk pregnant cases if not managed timely.
- ✍ It will track every high risk pregnant woman till 42 days after delivery, so that she receives adequate treatment during the ante-natal period for healthy outcome of pregnancy.

About High Risk Pregnancy Policy:

- ✍ The High Risk Pregnancy Policy has been implemented across the state since November, 2017.
- ✍ The policy aims at identifying 100% name-based high-risk pregnancy cases and ensuring their delivery by specialists at civil hospitals.
- ✍ This initiative is also aimed at increasing the pace of decline in Maternal Mortality Rate (MMR), Infant Mortality Rate (IMR) and Still Birth Incidence as morbidity and mortality is quite high in high risk pregnant cases.

Haryana's birth companion strategy:

- ☑ Haryana had also implemented birth companion strategy under which one female attendant would be allowed during delivery in the labour room.
- ☑ The presence of a female birth companion during delivery is a step towards improving the quality of care in labour rooms for improving the maternal and neo-natal outcome and for respectful maternity care.

Source: Times of India

Govt launches Virtual ID to safeguard Aadhaar data**Why in news?**

In the wake of reports of an alleged breach of the Aadhaar database published in a newspaper last week, the Unique Identification Authority of India (UIDAI) has introduced two-tier security feature viz. Virtual ID and Limited KYC.

- ◆ The move aims to strengthen security and privacy of Aadhaar data.
- ◆ It will also reduce the collection of Aadhaar numbers by various agencies.

About Virtual ID:

- ✍ The Virtual ID will be random 16-digit number that can be generated from UIDAI's website and give for various purposes, wherever Aadhaar number is necessary to provide.
- ✍ It will be linked with biometrics of user that will give any authorised agency limited access of details like name, address and photograph.
- ✍ Using it, Aadhaar-card holders do not need to share their actual 12-digit biometric ID for any authentication.
- ✍ User can generate as many Virtual IDs as they want. The older ID will get automatically cancelled at time new one is generated.
- ✍ It will be obligatory for all agencies that undertake authentication to accept Virtual ID from their users.

Limited KYC:

- ✍ It was introduced to address issue of storage of Aadhaar number within various databases. It will only provide need-based or limited details of user to authorised agency that is providing particular service.
- ✍ It will evaluate **Authentication User Agencies (AUAs)** and split them into two categories: Global AUAs and Local AUAs.
- ✍ Global AUAs will have access to full demographic details of an individual along with the ability to store Aadhaar numbers within their system.
- ✍ Remaining AUAs will be branded as Local AUAs and will neither get access to full KYC, nor can they can store Aadhaar number on their systems.
- ✍ Instead, they will get tokenised number (**UID Token**) issued by UIDAI to identify their customers. It will be 72 character alphanumeric.
- ✍ UID token allows an agency to ensure uniqueness of its beneficiaries, customers etc. without having to store Aadhaar number in their databases.

Source: The Hindu

Ministry of Railway launches SFOORTI Application

Why in news?

In a major digital initiative to help plan the traffic flows and optimize freight operations, Ministry of Railways have launched **Smart Freight Operation Optimisation & Real Time Information (SFOORTI)** App for Freight Managers which provides features for monitoring and managing freight business using Geographic Information System (GIS) Views and Dashboard.

Salient features of SFOORTI Application:

- ✍ With this application, movement of freight trains on Geographic Information System (GIS) view can be tracked.
- ✍ Both passenger and freight trains can be tracked over Zones/Divisions/ Sections in single GIS View.
- ✍ Freight business can be monitored.
- ✍ Comparative Analysis of Zonal/Divisional Traffic.
- ✍ Analysis of new traffic captured and traffic lost.
- ✍ This app provides a Bird's eye view of all Freight Assets in a single window.
- ✍ Provides end to end Rake movement on Geospatial view
- ✍ Expected Traffic at Interchange points to evaluate daily performance can be viewed.
- ✍ Performance of each zone and divisions with respect to loading and utilization of freight assets can be viewed.
- ✍ Sectional performance monitoring for sections, divisions and zones shall help in traffic routing.
- ✍ Freight terminal and sidings can be better monitored to ensure better turnaround of rakes.

Significance of Railway Freight traffic:

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

Source: PIB

India misses Kala Azar elimination deadline

Why in news?

India has missed December 2017 deadline announced for elimination of Kala Azar (black fever) in 2017-18 Budget by the Union Government.

- ◆ Elimination in this case is defined as reducing annual incidence of disease to less than 1 case per 10,000 people at the sub-district level.
- ◆ In recent times endemic blocks have increased from 61 to 68 in 17 districts of Bihar and Jharkhand.

Reasons for rise in endemic blocks

- ✍ The active case findings rather than actual increase in disease are main reason for increase in number of endemic blocks.
- ✍ Moreover, little-known skin condition called Post Kala Azar Dermal Leishmaniasis (PKDL) — a red flag for transmission of Kala Azar—also has been growing steadily over the past few years.

Reasons for missing deadline

- ✘ For elimination of Kala Azar, its vector needs to be eliminated first. But it is very difficult to eliminate vector as it dwells in wooden structure and escapes various measures to kill it.
- ✘ The majority of houses in endemic blocks are made from wood. Hence, to stop infection transmission, pucca houses need to be built.

What is kala-azar?

Kala-azar, also known as black fever and Dumdum fever, is a slow progressing indigenous disease caused by a protozoan parasite of genus Leishmania.

- ✘ The parasite primarily infects reticuloendothelial system and may be found in abundance in bone marrow, spleen and liver.
- ✘ It is **zoonotic** (or parasitic) infection transmitted by sand fly (*Leishmania donovani*), a blood-sucking pest, which is one-third size of mosquitoes and found in moist (humid) mud and sand and in close proximity to livestock.
- ✘ Kala-azar is **a vector borne disease**.
- ✘ Its signs and symptoms include fever, weight loss, fatigue, anemia, and substantial swelling of liver and spleen.
- ✘ It is treatable and requires a medical diagnosis.
- ✘ If untreated, kala-azar can kill within two years of onset of ailment.
- ✘ Kala-azar **belongs to Neglected Tropical Disease (NTD)** family of diseases which affect poorest populations.
- ✘ It is **second-largest parasitic killer in world after Malaria**.
- ✘ It is endemic to Indian subcontinent in 119 districts in four countries (Bangladesh, Bhutan, India and Nepal).

Kala-azar in India:

- ☑ India accounts for half the global burden of Kala-azar disease.
- ☑ **In India, *Leishmania donovani* is the only parasite causing this disease.**
- ☑ Sandfly of genus *Phlebotomus argentipes* are the only known vectors of kala-azar in India
- ☑ Indian Kala-azar has a unique epidemiological feature of being **Anthroponotic**; human is the only known reservoir of infection.

Source: The Hindu

ISRO launches its 100th satellite into space**Why in news?**

Indian Space agency ISRO has successfully sent up a rocket carrying India's 100th satellite along with 30 others, four months after failed launch.

- ◆ The Polar Satellite Launch Vehicle or PSLV lifted off from Sriharikota in Andhra Pradesh. This is the 42nd flight of the PSLV.

Key Facts:

- ◆ The PSLV-C40 placed 31 satellites, originating from seven countries.
- ◆ The 30 other satellites onboard include two other satellites from India and 28 satellites from six countries — Canada, Finland, France, Korea, the United Kingdom and the United States.
- ◆ The Cartosat-2 satellite, the third in the series, was deployed to relay high resolution scene specific spot imageries. The images will be useful for cartographic applications, urban and rural

applications, coastal land use and regulation, road network monitoring, water distribution, creation of land use maps and change detection to bring out geographical Land Information Systems and Geographical Information System applications.

- ◆ The mission is a unique one, since the satellites were launched in two orbits.
- ◆ Thirty of the satellites were launched in an orbit 550 km about, and one 359-km above the Earth.
- ◆ This was done through what scientists call the “**multiple burn technology**” under which the rocket’s engine is switched off and then switched on to control its height.
- ◆ This is ISRO’s first launch in 2018 and it is also the first after the unsuccessful mission of IRNSS-1H in August last year.

About Polar Satellite Launch Vehicle (PSLV):

PSLV is an **expendable launch system** developed and operated by the Indian Space Research Organisation (ISRO).

- ☑ It was developed to allow India to launch its Indian Remote Sensing (IRS) satellites into sun-synchronous orbits, a service that was, until the advent of the PSLV, commercially available only from Russia.
- ☑ PSLV can also launch small size satellites into geostationary transfer orbit (GTO).
- ☑ It is the **first Indian launch vehicle to be equipped with liquid stages**.
- ☑ After its first successful launch in October 1994, PSLV emerged as the reliable and versatile workhorse launch vehicle of India with 39 consecutively successful missions by June 2017.
- ☑ During 1994-2017 period, the vehicle has launched 48 Indian satellites and 209 satellites for customers from abroad.
- ☑ Besides, the vehicle successfully launched two spacecrafts – Chandrayaan-1 in 2008 and **Mars Orbiter Spacecraft** in 2013 – that later traveled to Moon and Mars respectively

Source: The Hindu

NASA’s James Webb Space Telescope passes critical milestone

Why in news?

NASA’s James Webb Space Telescope — the world’s premier infrared space observatory of the next decade — has successfully completed critical testing in a massive thermal vacuum chamber, enabling it to function properly in the extremely cold and airless environment in space in 2019.

About James webb space telescope:

Webb Space Telescope is the most sophisticated — and expensive — space observatory ever designed.

- ◆ It is bigger and more powerful than NASA’s operational Hubble Space Telescope.
- ◆ JWST is a space telescope optimized for observations in the infrared.
- ◆ It is the formal successor to the Hubble Space Telescope and the Spitzer Space Telescope. It is 100 times more potent than its predecessor, Hubble, and three times larger.
- ◆ After its launch, it will be the premier observatory of the next decade.
- ◆ It was formerly known as the Next Generation Space Telescope (NGST).
- ◆ It is an international collaboration between of about 17 countries including NASA, European Space Agency (ESA) and the Canadian Space Agency (CSA).
- ◆ The main component of the telescope is the primary mirror, which consists of 18 hexagonal mirrors and looks like a giant puzzle piece.

Applications:

- ☑ It will help in broad range of investigations across the fields of astronomy and cosmology.
- ☑ It will help to understand the origins of the universe, evolution of our own Solar System, search for signs of life on faraway planets.
- ☑ It can also analyze the atmospheres of exoplanets that pass in front of their stars.

Source: Economic Times

Station Explorer for X-ray Timing and Navigation Technology

Why in news?

NASA has invented a new type of autonomous space navigation that could see human-made spacecraft heading into the far reaches of the Solar System, and even farther – by using pulsars as guide stars.

- ◆ It's called **Station Explorer for X-ray Timing and Navigation Technology, or SEXTANT** (named after an 18th century nautical navigation instrument).

About SEXTANT:

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

Mechanism of SEXTANT:

- ✎ The technology uses X-ray technology to see millisecond pulsars, using them much like a GPS uses satellites.
- ✎ The electromagnetic radiation beaming from pulsars is most visible in the X-ray spectrum, which is why NASA's engineers chose to employ X-ray detection in SEXTANT. To do so, they used a washing machine-sized observatory attached to the International Space Station.
- ✎ Called Neutron-star Interior Composition Explorer, or NICER, it contains 52 X-ray telescopes and silicon-drift detectors for studying neutron stars, including pulsars.

Potential Applications:

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

What are pulsars?

- ✎ Pulsars are highly magnetised, rapidly rotating neutron stars – the result of a massive star's core collapsing and subsequently exploding. As they spin, they emit electromagnetic radiation.
- ✎ If an observer is in the right position, they can appear as sweeping beams, like a cosmic lighthouse.
- ✎ They're also extraordinarily regular – in the case of some millisecond pulsars, which can spin hundreds of times a second, their regularity can rival that of atomic clocks.

Source: Economic Times

Indo-US joint military exercise 'Vajra Prahar' held in Seattle

Why in news?

The Indo-US joint military exercise 'Vajra Prahar' was held at Joint Base Lewis-McChord (JBLM) in **Seattle (a seaport city on the west coast of the United States)** in third week of January in line with the increasing military cooperation between both countries.

- ◆ The exercise mainly focussed on special operations in urban areas.

Aim of the Vajra Prahar:

- ✎ The aim of the Vajra Prahar exercise is to promote military relations between two countries by enhancing interoperability and mutual exchange of tactics between Special Forces.

About 'Vajra Prahar' exercise:

- ✎ 'Vajra Prahar' is Indo-US Special Forces joint training exercise conducted alternately in India and the US started in 2010.
- ✎ It is conducted annually, but there was a gap of three years between 2012 and 2015.
- ✎ The last edition was held in Jodhpur in March 2017.
- ✎ This edition's Indian Army team is from the Pune-headquartered Southern Command.

Objectives of the Vajra Prahar:

- ☑ To share the best practices between the two armies
- ☑ To develop joint strategies by sharing expertise of conducting operations in a counter-insurgency and counter-terrorism environment
- ☑ To capitalise on the rich repository of experiences of each other armies.

Source: The Hindu, Indian Express

Simplified 'Make-II': Major Steps Towards 'Make in India' in Defence Production**Why in news?**

In a major boost to 'Make in India' in Defence, the Defence Acquisition Council (DAC) has simplified 'Make II' procedure, which prescribes guidelines to be followed to develop and manufacture defence equipment through Indian Industry.

- ◆ DAC has also cleared procurement proposal of 72,400 assault rifles and 93,895 carbines on fast track basis for Rs 3,547 crore.

Simplification of Make II procedure:

- ✎ The simplification of Make II procedure aims encourage participation of private sector in defence design and production and give boost to 'Make in India' programme in Defence Sector.
- ✎ Since no government funding is involved in 'Make II' project, the DAC felt it necessary to simplify the procedure to make it industry friendly, with minimal government control.
- ✎ The salient aspects of the revised procedure will now allow Ministry of Defence to accept suo-motu proposals from the industry and also allows start-ups to develop equipment for Indian Armed Forces.
- ✎ The minimum qualification criteria to participate in 'Make II' projects has also been relaxed by removing conditions related to credit rating and reducing financial net worth criteria.
- ✎ As per the earlier 'Make II' procedure, only two vendors were shortlisted to develop prototype equipment. Now, all vendors meeting the relaxed eligibility criteria will be allowed to participate in the prototype development process.
- ✎ The vendor will not be required to submit Detailed Project Report. After accord of approval of the 'Make II' project by the council, all clearances will be accorded at Service HQ (SHQ) level.

About Defence Acquisition Council (DAC):

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

- ✎ It is **headed by the Defence Minister**.

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

Objective of DAC:

- ✎ The objective of the Defence Acquisition Council is to ensure expeditious procurement of the approved requirements of the Armed Forces in terms of capabilities sought, and time frame prescribed, by optimally utilizing the allocated budgetary resources.

Functions of the DAC include:

- ☑ In-principle approval of 15 Year Long-Term Integrated Perspective Plan for Defence Forces;
- ☑ Accord of Acceptance of Necessity to acquisition proposals;
- ☑ Categorization of the acquisition proposals relating to 'Buy', 'Buy & Make' and 'Make';
- ☑ Issues relating to Single vendor clearance;
- ☑ Decision regarding 'offset' provisions in respect of acquisition proposals above Rs. 300 crores;
- ☑ Decisions regarding Transfer of Technology under 'Buy & Make' category of acquisition proposals; and
- ☑ Field Trial evaluation.

Source: PIB

NPPA fixes retail price of 30 drug formulations

Why in news?

Drug price regulator National Pharmaceutical Pricing Authority (NPPA) has fixed retail price for 30 drug formulations, including those used for treatment of diabetes, bacterial infections and high blood pressure.

Key Facts

- ◆ NPPA fixes ceiling price of essential medicines of **Schedule I under the Drugs (Prices Control) Order (DPCO) 2013**.
- ◆ The National Pharmaceutical Pricing Authority (NPPA) has also revised the prices of three formulations, including that of anti cancer drug — Gemcitabine.

What are Essential medicines?

- ◆ Essential medicines, as defined by the World Health Organization (WHO) are those drugs that satisfy the health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in appropriate dosage forms, at a price the community can afford.

How price of essential drugs is decided?

- ✎ In respect of medicines that are not under price control, manufacturers are allowed to increase the maximum retail price by 10% annually. The calculation for essential drugs is based on the simple average of all medicines in a particular therapeutic segment with sales of more than 1 percent.

About National List of Essential Medicines (NLEM):

- ✎ The NLEM is a dynamic list and reviewed every three years to include or exclude drugs as relevant to the newest medical innovations and aligned to the current market competition.

The Indian government recognized the national list of essential medicines as a key instrument in balanced healthcare delivery system which includes accessible, affordable and quality medicine at the primary, secondary, tertiary levels of healthcare.

About National Pharmaceutical Pricing Authority (NPPA):

- ✎ NPPA is an organization of the Government of India which was established, inter alia, to fix/ revise the prices of controlled bulk drugs and formulations and to enforce prices and availability of the medicines in the country, under the Drugs (Prices Control) Order, 1995.
- ✎ The organization is also entrusted with the task of recovering amounts overcharged by manufacturers for the controlled drugs from the consumers.
- ✎ It also monitors the prices of decontrolled drugs in order to keep them at reasonable levels.

Functions of National Pharmaceutical Pricing Authority:

- ☑ To implement and enforce the provisions of the Drugs (Prices Control) Order in accordance with the powers delegated to it.
- ☑ To deal with all legal matters arising out of the decisions of the Authority.
- ☑ To monitor the availability of drugs, identify shortages, if any, and to take remedial steps.
- ☑ To collect/ maintain data on production, exports and imports, market share of individual companies, profitability of companies etc., for bulk drugs and formulations.
- ☑ To undertake and/ or sponsor relevant studies in respect of pricing of drugs/ pharmaceuticals.
- ☑ To recruit/ appoint the officers and other staff members of the Authority, as per rules and procedures laid down by the Government.
- ☑ To render advice to the Central Government on changes/ revisions in the drug policy.
- ☑ To render assistance to the Central Government in the parliamentary matters relating to the drug pricing.

Source: The Hindu, Live Mint

Maharashtra becomes the first state to unveil public cloud policy**Why in news?**

Maharashtra has come out with a **public cloud policy virtually mandating its departments to shift their data storage onto the cloud**, which intends to make them available for free to the general public.

Key Facts

- ◆ With this, Maharashtra becomes the first state to unveil public cloud policy.
- ◆ In addition, the State Cabinet has also approved **State Innovation and Start-up Policy** to attract Rs.5,000 crore investments in development of incubation and start-ups. It will be applicable till 2022.

Need for such policy:

- ◆ The government produces 1.25 lakh documents every day. Most of them are being stored at 75 centralised data centres, resulting in a high maintenance cost.

With the public cloud, the government by skipping to invest on these centres, would reduce expenditure on IT resources.

Key features of the state policy:

- ◆ Once the policy is implemented and the data stored on the cloud, the access to the public cloud services will either be free or on a pay-per-usage model.
- ◆ The State policy is compliant with the Union government's National Data Sharing and Accessibility Policy, 2012, which mandates facilitation of access to government-owned shareable data in human readable and machine readable forms.
- ◆ Under the policy framework, state government will make mandatory its various departments for storing data within country and to use public cloud in cases wherever Right to Information

Act (RTI) is applicable. Later, it will also allow for enhanced security features for private and sensitive data to be stored on the cloud.

Significance of this policy:

- ◆ The public cloud policy will accelerate e-governance, and open an area for private sector investments, taking new technologies to all the departments as the government is the biggest data creator and consumer.
- ◆ The policy will create a \$2 billion opportunity for the industry.

Apprehensions:

- ☑ According to experts, public perception even of the blockchain technology — an open source ledger — is still connected to the security aspect. Such systems are not hack-proof, and users will ask questions of it for now.

Source: The Hindu, Economic Times

Successful Fifth flight test of Agni-5 Ballistic Missile

Why in news?

Long Range Surface-to-Surface Ballistic Missile, Agni-5, was successfully flight tested for its full range from Dr Abdul Kalam Island, Odisha.

- ◆ This was the fifth test of the Missile and the third consecutive one from a canister on a road mobile launcher.
- ◆ All the five missions have been successful.

Key facts:

- ◆ The first missile of the series, Agni-I was developed under the Integrated Guided Missile Development Program and tested in 1989.
- ◆ At present India in its armoury of Agni missile series, possesses Agni-I (700 km range), Agni-II (2000 km range), Agni-3 (2,500 km range) and Agni-4 (more than 3,500 range).

About Agni-5:

- ✍ The Agni-5 is three-stage solid propellant nuclear-capable intercontinental ballistic missile (ICBM).
- ✍ It has a range of over 5,000 km covering almost all of Asia including Pakistan and China and Europe.
- ✍ It is capable of carrying a nuclear warhead of more than one tonne.
- ✍ It is three-stage solid propellant ICBM indigenously developed by the Defence Research and Development Organisation (DRDO).
- ✍ India describes the Agni – 5 missile system as a ‘weapon of peace’.
- ✍ Unlike other missiles of Agni series, Agni-5 is the most advanced having new technologies incorporated with it in terms of navigation and guidance, warhead and engine.
- ✍ It carries Multiple Independently Targetable Re-entry Vehicles (MIRV) payloads. A single MIRV equipped missile that can deliver multiple warheads at different targets.
- ✍ It also incorporates advanced technologies involving ring laser gyroscope and accelerometer for navigation and guidance.

Significance:

- ☑ The missile will enhance India’s strategic and deterrence capabilities.
- ☑ Once this missile is inducted in Services, India will join the super exclusive club of countries having ICBMs (missiles with a range of over 5,000-5,500km) alongside the US, Russia, China, France and the United Kingdom.

Source: PIB, The Hindu

Centre plans setting up of Cyber Warrior Police Force to tackle internet-related crimes

Why in news?

The Ministry of Home Affairs (MHA) has decided to set up Cyber Warrior Police Force (CWPF) and Indian Cyber Crime Coordination Centre (I4C) to tackle internet-related crimes such as cyber threats, child pornography and online stalking.

- ◆ These divisions will be set up under MHA's newly created Cyber & Information Security (CIS) Division.

About the Indian Cyber Crime Coordination Centre (I4C):

- ✎ The Indian Cyber Crime Coordination Centre will be set up under the newly created Cyber and Information Security (CIS) division of the MHA.
- ✎ CIS will have four wings, namely security clearance, cybercrime prevention, cyber security and information security.
- ✎ The I4C will assist in centralising cyber security investigations, prioritise the development of response tools and bring together private companies to contain the menace.

About Cyber Warrior Police Force (CWPF)

- ✎ The CWPF is likely to operate under National Information Security Policy and Guidelines wing of MHA's CIS division.
- ✎ It is proposed to be raised on lines of Central Armed Police Force (CAPF).
- ✎ So far, there has been no decision on the CWPF's jurisdiction, where it will derive its powers or personnel from and whether it will be empowered to make arrests.

Need:

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

Background:

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

Source: The Hindu

Crime and Criminal Tracking Network System (CCTNS)

Why in news?

As part of the Crime and Criminal Tracking Network System (CCTNS), Coimbatore police have launched the facility to serve summons to witnesses through Short Messaging Service (SMS) on mobile phones.

- ◆ Tamil Nadu state police have successfully implemented the CCTNS mission mode project under National e-Governance programme in all the 1,913 FIR registering units of the Tamil Nadu police.

What is CCTNS project?

- ✎ Crime and Criminal Tracking Network and Systems (CCTNS) is a Mission Mode Project (MMP) under the National e-Governance Plan of Govt. of India.

- ✎ CCTNS is a project initiated in June 2009 which aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at the Police Station level.
- ✎ This will be done through adoption of principles of e-Governance, and creation of a nationwide networked infrastructure for evolution of IT-enabled state-of-the-art tracking system around “investigation of crime and detection of criminals”.

Functions:

- ✎ The Project will interconnect about 15000 Police Stations and additional 5000 offices of supervisory police officers across the country and digitize data related to FIR registration, investigation and charge sheets in all Police Stations.
- ✎ It will not only automate Police functions at Police station and higher levels but will also create facilities and mechanism to provide public services like registration of online complaints, ascertaining the status of case registered at the police station, verification of persons etc.
- ✎ In 2015, an additional objective of establishing a basic platform for an Inter-operable Criminal Justice System (ICJS) was added to the Project.

Significance:

- ✎ The Full implementation of the Project with all the new components would lead to a Central citizen portal having linkages with State level citizen portals that will provide a number of citizen friendly services like Police Verification for various purposes including passport verification, reporting a crime including cyber-crime and online tracking of the case progress etc.
- ✎ The project will enable National level crime analytics to be published at increased frequency, which will help the policy makers as well as lawmakers in taking appropriate and timely action, it will also enable Pan-India criminal/accused name search in the regional language for improved inter-state tracking of criminal movement.
- ✎ This would lead to development of a national database of crimes and criminals.

Source: The Hindu

Government pitches for Budapest Convention on cyber security

Why in news?

Making a strong pitch to sign the Budapest Convention on cyber crime, the Ministry of Home Affairs recently flagged the need for international cooperation to check cyber crime, radicalisation and boost data security.

- ◆ However, the move is being opposed by the Intelligence Bureau (IB).

Background:

- ✎ India was reconsidering its position on becoming a member of the Budapest Convention because of the surge in cyber crime, especially after a push for digital India.

Why the move is opposed by IB?

- ✎ The move is being opposed by the Intelligence Bureau (IB) on the grounds that sharing data with foreign law enforcement agencies infringes on national sovereignty and may jeopardise the rights of individuals.

What is Budapest Convention?

The Convention on Cybercrime or Budapest Convention is the **only binding multilateral treaty instrument aimed at combating cybercrime**.

- ✎ It was drafted by the **Council of Europe** in Strasbourg, France with active participation from its observer states in 2001.
- ✎ It was drawn up with the active participation of the Council of Europe’s observer states Canada, Japan, South Africa and the United States.

- ✎ The Convention has 56 members, including the US and the UK.
- ✎ The Convention provides a framework for international cooperation between state parties to the treaty.
- ✎ It is **open for ratification even to states that are not members of the Council of Europe.**
- ✎ The Convention is the only substantive multilateral agreement with a stated objective of addressing cybercrime with convergent, harmonized legislation and capability building. Therefore, it is widely recognized as a decisive document on international best practice and enjoys compliance even from non-signatory states.
- ✎ Most model legislation and attempts at drafting a new international instrument on cybercrime have also relied on the principles expounded in this Convention.
- ✎ The Budapest Convention is also supplemented by an Additional Protocol to the Convention which was adopted in 2003.

Offences under the Convention:

- ☑ The Budapest Convention provides for the criminalisation of conduct, ranging from illegal access, data and systems interference to computer-related fraud and child pornography, procedural law tools to make investigation of cybercrime and securing of e-evidence in relation to any crime more effective, and international police and judicial cooperation on cybercrime and e-evidence.

Source: Indian Express

INSV Tarini crosses Cape Horn

Why in news?

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

What is the Drake Passage?

The Drake Passage is the body of water between South America's Cape Horn and the South Shetland Islands of Antarctica.

- ✎ It connects the southwestern part of the Atlantic Ocean (Scotia Sea) with the south-eastern part of the Pacific Ocean and extends into the Southern Ocean.
- ✎ The passage between Cape Horn and Livingston Island is the shortest crossing from Antarctica to any other landmass.
- ✎ There is no significant land anywhere around the world at the latitudes of Drake Passage, which is important to the unimpeded flow of the Antarctic Circumpolar Current which carries a huge volume of water through the Passage and around Antarctica.

About Navika Sagar Parikrama:

- ✎ This is the first ever Indian circumnavigation of the globe by an all-women crew.
- ✎ The voyage of Navika Sagar Parikrama began from Goa coast in September 2017 and will be finishing around March 2018.
- ✎ The expedition will be covered in five legs, with stop-overs at 4 ports: Fremantle (Australia), Lyttleton (New Zealand), Port Stanley (Falklands), and Cape Town (South Africa).
- ✎ The project is considered essential towards promoting Ocean Sailing activities in the Indian Navy along with showcasing the Government's support for empowering women.

About INSV Tarini:

- ✎ INSV Tarini is a 56-foot sailing vessel built in India by M/s Aquarius Shipyard Pvt Ltd, Goa.

- ✎ It was inducted into the Indian Navy recently in February 2017.
- ✎ It has Raymarine navigation suite and an array of satellite communication systems for perfect navigation anywhere in the world.
- ✎ It showcases the 'Make in India' initiative on the International forum.

Significance of the voyage:

- ☑ The voyage aims to show case the 'Make in India' initiative by sailing onboard the indigenously built INSV Tarini.
- ☑ It also aims to showcase 'Nari Shakti' on the world platform and help revolutionise societal attitudes and mindset towards women in India by raising visibility of their participation in challenging environs.
- ☑ Besides, the crew would monitor and report marine pollution on the high seas.

Source: The Hindu

Cyber Surakshit Bharat

Why in news?

To strengthen cybersecurity ecosystem in India in line Government's vision for a 'Digital India', the Ministry of Electronics and Information Technology (MeitY) has launched **Cyber Surakshit Bharat initiative**.

- ◆ It was launched in association with National e-Governance Division (NeGD) and industry partners.

About Cyber Surakshit Bharat:

Cyber Surakshit Bharat is first public-private partnership of its kind and will leverage the expertise of the IT industry in cybersecurity.

Objective:

- ✎ To spread awareness about cybercrime and building capacity for safety measures for Chief Information Security Officers (CISOs) and frontline IT staff across all government departments.

How does it operate?

- ✎ It will be operated on **three principles of awareness, education and enablement**.
- ✎ It will include an awareness program on importance of cyber security.
- ✎ It will also include a series of workshops on the best practices and enablement of the officials with cyber security health tool kits to manage and mitigate cyber threats.

Training programmes:

- ✎ It will conduct series of training programmes across country in the next six months.
- ✎ It will be attended by CISOs and technical officials from central government, state governments and UTs, PSBs, PSUs and defence forces, defence PSUs and technical arms of Air Force, Army and Navy.

Partners:

- ☑ The founding partners include leading IT companies such as Microsoft, Intel, WIPRO, Redhat and Dimension Data.
- ☑ Its knowledge partners include Cert-In, NIC, NASSCOM and FIDO Alliance and premier consultancy firms Deloitte and EY.

Source: PIB

Parker Solar Probe: Testing Starts on 'Touch the Sun' Spacecraft

Why in news?

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

About NASA's Parker Solar Probe:

NASA's Parker Solar Probe will be the first-ever mission to "touch" the sun.

Objectives:

- ✎ To trace how energy and heat move through the solar corona and
- ✎ To explore what accelerates the solar wind as well as solar energetic particles.

Goals:

- ✎ Determine structure and dynamics of magnetic fields at sources of solar wind.
- ✎ Trace flow of energy that heats corona and accelerates solar wind.
- ✎ Determine what mechanisms accelerate and transport energetic particles.
- ✎ Explore dusty plasma near Sun and its influence on solar wind and energetic particle formation.

Key facts about the probe:

- ✎ The spacecraft, about the size of a small car, will travel directly into the sun's atmosphere about 6.2 million miles from our star's surface.
- ✎ It is scheduled for launch in 2018 to explore the Sun's outer atmosphere.
- ✎ The probe will use Venus' gravity during seven flybys over nearly seven years to gradually bring its orbit closer to the Sun.
- ✎ The Parker Solar Probe will perform its scientific investigations in a hazardous region of intense heat and solar radiation.
- ✎ The primary power for mission is dual system of solar panels (photovoltaic array). Secondary source consists of much smaller secondary array power that uses pumped-fluid cooling to maintain operating temperature.

Solar shadow-shield

- ☑ The spacecraft is designed to endure harsh environment near Sun, by approaching within 8.5 solar radii (5.9 million kilometers) to 'surface' (photosphere) of Sun where incident solar intensity is approximately 520 times intensity at Earth orbit.
- ☑ It will be protected by solar shadow-shield made of reinforced carbon-carbon composite.
- ☑ The spacecraft systems and scientific instruments are located in central portion of shield's shadow, where direct radiation from Sun is fully blocked.

Source: Economic Times

Bharat Biotech's rotavirus vaccine gets WHO pre-qualification

Why in news?

For the first time, the Rotavac, a vaccine conceived and developed from scratch in India, has been "pre-qualified" by the World Health Organisation.

What does that mean?

- ◆ To be "pre-qualified" means that the vaccine can be sold internationally to several countries in Africa and South America.

So far, several vaccines from India have been pre-qualified by WHO, but Rotavac is first vaccine entirely developed locally to get this status in safety and efficacy.

Significance of this recognition:

- ◆ This recognition signifies credible industrial, scientific and regulatory process in place to develop vaccines in India.
- ◆ It paves the way for health and humanitarian organizations such as UNICEF, GAVI and Pan-American Health Organization to procure Rotavac for public health vaccination programmes across the world.

About Rotavac:

Rotavac protects against childhood diarrhoea caused by the rotavirus.

- ✎ It was **conceived and developed by the Hyderabad-based Bharat Biotech Limited.**
- ✎ It was developed under the **joint collaboration between India and United States in area of medical research.**
- ✎ It was developed under public-private partnership (PPP) model that involved Ministry of Science and Technology, institutions of the US Government and NGOs in India supported by Bill and Melinda Gates Foundation.
- ✎ The vaccine was built on strain of the virus isolated at the All India Institute of Medical Sciences (AIIMS), New Delhi over 30 years ago.
- ✎ It has been included in India's national immunisation programme. The vaccine was tested in field for over a year, have not shown any negative effect.

About Rotavirus:

Rotavirus is the most common cause of severe vomiting and diarrhoea among infants and young children less than five years of age.

- ✎ Nearly every child in the world has been infected with rotavirus at least once by the age of five.
- ✎ There are eight species of this virus, referred to as A, B, C, D, E, F, G and H. *Rotavirus A*, the most common species, causes more than 90% of rotavirus infections in humans.
- ✎ The virus is transmitted by the faecal-oral route. It infects and damages the cells that line the small intestine and causes gastroenteritis (which is often called "stomach flu" despite having no relation to influenza).

In 2014, nearly 80,000 children died due to rotavirus, whereas about 9 lakh were hospitalised due to episodes of severe diarrhoea.

Universal Immunization Programme

Universal Immunization Programme is a vaccination program launched by the Government of India in 1985. It became a part of Child Survival and Safe Motherhood Programme in 1992.

- ☑ It is currently one of the key areas under National Rural Health Mission(NRHM) since 2005.
- ☑ The program consists of vaccination for 10 diseases-
 1. Tuberculosis,
 2. Diphtheria,
 3. Pertussis (whooping cough),
 4. Tetanus,
 5. Poliomyelitis,
 6. Measles,
 7. Hepatitis B,

8. Diarrhoea,
 9. Japanese Encephalitis and
 10. Hepatitis B was added to the UIP in 2007.
- In 2014 it was announced that four vaccines will be added to the program, namely rotavirus, rubella and Japanese encephalitis, as well as the injectable polio vaccine.

Source: The Hindu, Indian Express

WEF launches Global Centre for Cybersecurity

Why in news?

The World Economic Forum (WEF) has launched new Global Centre for Cybersecurity in a bid to safeguard world from hackers and growing data breaches — especially from nation-states.

About Global Centre for Cybersecurity:

The Global Centre for Cybersecurity will function as an autonomous organization under WEF.

- ✎ The centre will be headquartered in Geneva, Switzerland and will become operational from March 2018.
- ✎ It will help to build a safe and secure global cyberspace.
- ✎ Its aim is to establish first global platform for governments, businesses, experts and law enforcement agencies to collaborate on cybersecurity challenges.
- ✎ It will draw on WEF's government and industry support to work towards more secure cyberspace through its established multi-stakeholder approach.

The centre will focus on the following aims:

- ✎ Consolidating existing cyber security initiatives of the World Economic Forum.
- ✎ Establishing an independent library of cyber best practices.
- ✎ Helping partners to enhance knowledge on cyber security.
- ✎ Working towards an appropriate and agile regulatory framework on cyber security.
- ✎ Serving as a laboratory and early-warning think tank for future cyber security scenarios.

Way ahead:

- ✎ As a truly borderless problem, cyber-attacks are surpassing the capacities and institutions that are currently dealing with this threat in an isolated manner.
- ✎ Only through collaboration, information exchange and common standards can the global community successfully counter organized digital crime.

About World Economic Forum (WEF):

WEF is Swiss non-profit foundation, also recognized as international institution for public-private cooperation.

- It is based in Geneva, Switzerland.
- It is committed to improve state of world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas.
- WEF is best known for its annual winter meeting for five days in **Davos, a mountain resort in Graubünden, in eastern Alps region of Switzerland.**

Source: The Hindu

NASA's new GOLD space weather instrument launched

Why in news?

NASA's Global-Scale Observations of the Limb and Disk (GOLD) instrument was recently launched atop an Ariane 5 rocket.

About Global-Scale Observations of the Limb and Disk (GOLD):

- ◆ GOLD will investigate the dynamic intermingling of space and Earth's uppermost atmosphere.
- ◆ GOLD is the first NASA science mission to fly an instrument as a commercially hosted payload.
- ◆ GOLD aims to shed light on how the uppermost layers of Earth's atmosphere can be affected by powerful space and Earth-based weather events.
- ◆ GOLD will be tasked with collecting far ultraviolet light data on Earth's atmosphere.
- ◆ GOLD will focus its attention on a relatively poorly-understood region of the upper atmosphere, where the charged particles of the ionosphere mingle with the diffuse neutral gases that make up the thermosphere.

Spectrographs:

GOLD is essentially an imaging spectrograph.

- ✎ Spectrographs are scientific instruments that have been designed to break light down into its constituent wavelengths and to measure their intensity.
- ✎ By examining the data from such an instrument, scientists can determine a wide variety of characteristics, including a target's composition and temperature.

Challenges:

- ✎ Earth's atmosphere is a complex, multi-layered protective shell that envelopes our planet, and safeguards its inhabitants from dangerous space weather emanating largely from our Sun. This tenuous region of the atmosphere has been known to undergo swift and significant changes in less than an hour.
- ✎ These fluctuations can be driven by the constant interactions between the ionosphere and thermosphere, in conjunction with weather emanating from both Earth and space.
- ✎ The complexity of these interactions makes it very difficult to predict when an atmospheric change in the ionosphere and thermosphere will occur, and this can be a serious problem for satellite communications.
- ✎ Disturbances in the ionosphere can interfere with, or even block signals being sent between Earth-based systems and orbital probes, potentially affecting cell-phone communications, and other vital services such as GPS, which is needed to safely navigate airplanes and ships.

Source: Economic Times

Stree Swabhiman Initiative launched for Women Health and Hygiene

Why in news?

Ministry of Electronics and Information Technology (MeITY) has recently launched Stree Swabhiman Initiative.

Aim of the initiative:

- ✎ Stree Swabhiman Initiative is aimed to create sustainable model for providing adolescent girls and women an access to affordable sanitary products by leveraging Common Service Centres (CSCs).

More about the Stree Swabhiman Initiative:

- ✎ Under this initiative, Common Service Centres (CSC) will provide access to affordable, reliable and modern (eco-friendly) sanitary napkins (menstrual pads) to adolescent girls and women in rural areas.

- ✎ Its purpose is to improve awareness on menstrual health and hygiene of women, thus help to protect dignity and rights of women.
- ✎ Under this initiative, semi-automatic and manual sanitary napkin manufacturing units will be set up at CSC for producing affordable and eco-friendly sanitary napkins.
- ✎ These micro manufacturing units will be operated by women entrepreneurs and generate employment for 8-10 women.

What are the Common Services Centers (CSCs)?

Common Services Centers (CSCs) are a strategic cornerstone of the Digital India programme.

- ✎ They are the access points for delivery of various electronic services to villages in India, thereby contributing to a digitally and financially inclusive society.
- ✎ CSCs enable the three vision areas of the Digital India programme:
 1. Digital infrastructure as a core utility to every citizen.
 2. Governance and services on demand.
 3. Digital empowerment of citizens.

Significance of the CSCs:

- ☑ CSCs are more than service delivery points in rural India. They are positioned as change agents, promoting rural entrepreneurship and building rural capacities and livelihoods.
- ☑ They are enablers of community participation and collective action for engendering social change through a bottom-up approach with key focus on the rural citizen.

Source: PIB

President launches 2018 Pulse Polio programme

Why in news?

President Ram Nath Kovind has launched Pulse Polio Immunization (PPI) Programme for year 2018 at an event, organised on the eve of the National Immunisation Day (NID), observed on 28 January.

Efforts to curb Polio in India:

- ✎ More than 17 crore children of less than 5 years across the country will be given polio drops as part of Government's drive to eradicate polio from the country.
- ✎ In order to mitigate the risk of poliovirus importation, the immunity against polio infection is maintained through National and Sub-National Polio rounds along with sustained high quality polio surveillance.
- ✎ For additional protection, the government has also introduced the injectable Inactivated Polio Vaccine (IPV) into its routine immunization program.
- ✎ India maintains a sensitive surveillance system for polio. All cases of paralysis with sudden onset in children up to 15 years (which is called Acute Flaccid Paralysis or AFP) are picked up by the polio surveillance network.
- ✎ Each of these cases is followed up and their stool samples tested for poliovirus in World Health Organization (WHO) accredited laboratories.
- ✎ In addition, sewage samples are collected from over 30 sites spread across the country for poliovirus detection at regular intervals.

about Polio Virus:

- ✎ Polio is a highly infectious viral disease which mainly affects young children under the age of 5.
- ✎ Poliovirus is usually spread from person to person. It mainly spreads through the faecal-oral route (e.g. contaminated water or food).

- ✎ After entering body, it multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.

About Pulse Polio Immunization (PPI):

- ✎ PPI Programme is massive immunization programme of Government to sustain polio eradication from the country.
- ✎ It was launched by Central Government in co-operation with international agencies, state governments and non-government/voluntary organizations in 1995 as result of World Health Organization's (WHO) Global Polio Eradication Initiative.
- ✎ PPI Programme was initiated with objective of achieving 100% coverage under OPV.
- ✎ It aims to reach unreached children through improved social mobilization, plan mop-up operations in areas where poliovirus has almost disappeared and maintain high level of morale among the public.
- ✎ Under this programme, all children under 5 years are given 2 doses of Oral Polio Vaccine (OPV) in month of December and January every year until polio is eradicated.

About IPV:

- ✎ Inactivated polio vaccine (IPV), also called the Salk vaccine, consists of inactivated (killed) poliovirus strains of all three poliovirus types.
- ✎ IPV is given by intramuscular or intradermal injection and needs to be administered by a trained health worker.
- ✎ IPV produces antibodies in the blood to all three types of poliovirus. In the event of infection, these antibodies prevent the spread of the virus to the central nervous system and protect against paralysis.
- ✎ IPV is an evidence-based intervention that not only ensures continued protection of children against all types of polio viruses, but also helps save vaccine — a move bound to positively impact global vaccine supply in the coming years.

In early 2016, India became the first country globally to introduce fractional doses of IPV in childhood immunisation programme in eight states and Union territories.

Background:

- ☑ In India the last polio case was recorded on 13 January 2011.

Source: PIB

Government urges Supreme Court to use 'rare doctrine' to stub tobacco industry rights

Why in news?

The Union government has urged the Supreme Court to enforce a rarely used doctrine to curb the \$11 billion tobacco industry's legal right to trade.

- ◆ For the first time ever, the government has asked the top court to classify tobacco as "**res extra commercium**", which is a Latin phrase for "outside commerce".
- ◆ The move is part of the government's effort to tame the tobacco companies looking to challenge tough regulations pertaining to the industry.

What is Res extra commercium?

- ✎ Res extra commercium means "a thing outside commerce" is a doctrine originating in Roman law.
- ✎ The Res extra commercium doctrine holds that certain things may not be the object of private rights, and are therefore insusceptible to being traded.

- ✎ In some contexts, it can refer to areas beyond national borders, such as space and the seabed.

What is the issue?

- ✎ India's tobacco labelling rules, which mandate 85% of a cigarette pack's surface be covered in health warnings, have been a sticking point between the government and the tobacco industry since they were enforced in 2016.
- ✎ But a court in southern Karnataka state last month quashed those labelling rules after the tobacco industry successfully argued the measure was "unreasonable" and violated its right to trade.

Rational behind imposing this doctrine:

- ✎ The government is not looking to ban tobacco and the only aim of invoking the Roman law doctrine was to curtail the industry's legal rights.
- ✎ Seeking to apply this doctrine to tobacco, the government argued it should have the power "to regulate business and to mitigate evils" to safeguard public health.

Implications:

- ✎ If this Roman law doctrine is applied, it would have severe implications on the tobacco industry; not only would the industry's legal rights to trade will suffer, but it will also give authorities more freedom to impose restrictions.
- ✎ Experts predict that the fate of the tobacco industry will be the same if a similar ruling is passed.

Background:

- ✎ This is not the first time the doctrine has been cited; in the 1970s, the top court's application of the doctrine led to two states completely banning alcohol, apart from allowing courts to take a stricter stance on regulating liquor.

Efforts made by the government to curb tobacco use:

- ☑ The government, over the years, initiated several reforms in the recent years to curb the use of tobacco that kills almost nine lakh people in India each year.
- ☑ Increased taxes, campaigns, advertisements are some of the measures taken by the government to curb the use of tobacco.

Source: Live Min

Government to set up apex cybercrime coordination centre

Why in news?

The Union Home Ministry has proposed to set up Indian Cyber Crime Coordination Centre (I4C), an apex coordination centre in New Delhi to deal with cybercrimes.

- ◆ It also has asked States to establish similar mechanism in every district and released funds for setting up of cyber-forensic training laboratory-cum-training centre for police officials in each State.
- ◆ It also has released funds to Cyber Crime Prevention against Women and Children Scheme.

About Indian Cyber Crime Coordination Centre (I4C)

- ✎ It will be apex coordination centre to deal with cybercrimes based in New Delhi.
- ✎ The Centre will be set up under the newly created Cyber and Information Security (CIS) division of the MHA.
- ✎ Under this framework, state governments will set up State cybercrime coordination cell at headquarter-level and also establish district cybercrime cells.

What would be the functions of the I4C?

- ✎ The Centre will coordinate with State governments/UTs and closely monitor cyberspace and social media with due emphasis on vernacular content.
- ✎ It will also block those websites which flout Indian laws and circulate child pornography and communally and racially sensitive content.
- ✎ It will also maintain list of suspects and leads generated during investigations in cybercrime cases and will be shared with law enforcement agencies through secured internal network.

Need for such coordination:

- ✎ Over a period of time, there has been phenomenal increase in use of computers, smart phones and internet in India. With this increase, cybercrimes have emerged as major challenge for law enforcement agencies.
- ✎ The cybercrime cases are of varied types ranging from defacement of government websites, online financial frauds, online stalking and harassment, and data thefts.
- ✎ Moreover, these cybercrime cases pose technical, legal and administrative challenges in investigation which require strengthening of institutional mechanism.

Background:

- ☑ Institutionalisation of I4C comes in wake of 1,44,496 cybersecurity attacks observed in country during 2014-16 period.
- ☑ MHA already has created Cyber and Information Security Division, a new wing to deal with new-age challenge.

Source: The Hindu

VINBAX-2018: Vietnam-India Bilateral Military Exercise**Why in news?**

The India-Vietnam Bilateral Army Exercise (VINBAX-2018) was conducted at Jabalpur in Madhya Pradesh.

- ◆ It is the first military exercise between the two countries.

About the VINBAX-2018:

- ✎ VINBAX-2018 was Table Top Exercise to carry out training for Peace Keeping Operations under United Nations (UN) mandate.
- ✎ It was jointly undertaken between 15 officers each from Indian Army and Vietnam People's Army.

Indo-Vietnam defence ties:

- ✎ Defence ties between India and Vietnam have been on an upswing with the primary focus being cooperation in the maritime domain.
- ✎ Both countries had signed a protocol on defence cooperation in 1994.
- ✎ The partnership was thereafter elevated to strategic level in 2007 and pact on boosting bilateral defence cooperation was signed in 2009.
- ✎ The strategic partnership was elevated to a comprehensive strategic partnership in September 2016.

Location of Vietnam:

- ☑ Vietnam is the easternmost country on the Indochina Peninsula in Southeast Asia.
- ☑ Vietnam is bordered by China to the north, Laos to the northwest, Cambodia to the southwest, Thailand across the Gulf of Thailand to the southwest, and the Philippines, Malaysia and Indonesia across the South China Sea to the east and southeast.

- ☑ Its capital city has been Hanoi since the reunification of North and South Vietnam in 1976, with Ho Chi Minh City as the most populous city.

Source: PIB

Anti-Leprosy Day observed

Why in news?

Anti-Leprosy Day was observed on 30th January 2018 across the nation.

About Anti-Leprosy Day:

- ✎ Anti-Leprosy Day is observed every year on January 30 in the memory of Mahatma Gandhi who attained martyrdom on this day in 1948, to remember his selfless efforts and care for the people affected with Leprosy.

World Leprosy Day:

- ✎ Every year, World Leprosy Day is observed internationally on the last Sunday of the January month.
- ✎ The day focuses on the target of zero cases of leprosy-related disabilities in children.

What is leprosy?

Leprosy (also known as Hansen's disease) is a progressive disease that gradually develops and slowly damages the skin and the nervous system.

- ✎ The disease takes a long time to develop anywhere between six months to 40 years and results in skin lesions and deformities which can be very disfiguring.
- ✎ Human-to-human transmission is considered as the primary source of infection, there are three other species which can carry and very rarely transfer *Mycobacterium leprae* (*M. leprae*) to humans. These are- mangabey monkeys, chimpanzees, nine-banded armadillos.
- ✎ The disease is known as a chronic granulomatous disease which is quite similar to tuberculosis since it produces inflammatory nodules (granulomas) in the nerves and skin over time.
- ✎ Leprosy is a **chronic granulomatous disease** mainly affecting the skin and peripheral nervous system.
- ✎ It can also affect the eyes and respiratory system.
- ✎ The disease is quite serious but with proper care and precaution it can be treated and prevented. It is curable with multidrug therapy (MDT).

How is leprosy caused?

- ✎ Leprosy is caused by an infection with ***Mycobacterium leprae* or M. lepromatosis bacteria**.
- ✎ The early symptoms actually start in the cooler parts of the body and include a loss of sensation.
- ✎ It generally takes about 3-5 years for the symptoms to appear after coming into contact with the leprosy-causing bacteria. With some people, they might take up to 20 years to develop any symptoms.
- ✎ The time between the contact with the bacteria and the appearance of the signs is known as the incubation period. The long incubation period of leprosy makes it really difficult for doctors to determine when and where a person with leprosy got infected.

How is leprosy diagnosed?

- ✎ A physical examination is conducted to look for tell-tale signs of the disease. A skin biopsy or scraping is performed.
- ✎ **A lepromin skin test** is also undertaken to determine the type of leprosy.

Background:

- ☑ According to the World Health Organisation (WHO), despite being eliminated globally as a public health problem in 2000, leprosy continues to mar the lives of individuals, and impacts families and communities.
- ☑ Leprosy affected 212 000 more people globally in 2015, of them 60% were in India.

Source: PIB, The Hindu

Navy launches third Scorpene class submarine Karanj

Why in news?

The Indian Navy has recently launched the third Scorpene class submarine, INS Karanj.

- ◆ It will undergo rigorous tests for the next one year before it is commissioned.

About INS Karanj:

- ✍ Karanj is the third of the six Scorpene-class submarines being built by Mazagon Dock Shipbuilders Limited (MDL) under the Project 75 programme of Indian navy.
- ✍ It has superior stealth features such as advanced acoustic silencing techniques, low radiated noise levels and hydrodynamically optimized shape.
- ✍ These stealth features give it an invulnerability, unmatched by most submarine.
- ✍ It is designed to operate in all theatres, including the tropics.
- ✍ It is provided with all means and communications to ensure interoperability with other components of a naval task.

Previous Scorpene submarines:

- ✍ The first one, **INS Kalvari**, a diesel-electric attack submarine was commissioned by Prime Minister Narendra Modi on December 14 last year.
- ✍ The second one, **INS Khandari**, was launched on January 12 this year is currently undergoing sea trials.

Background:

- ☑ The Scorpene submarines are a primary modernization requirement of the Indian Navy, which is currently faced with an ageing submarine fleet.
- ☑ MDL has the contract for the construction and transfer of technology for six Scorpene submarines.
- ☑ The submarines are being built in collaboration with French shipbuilding major Naval Group (formerly DCNS).

Source: The Hindu

High performance computer system Mihir launched

Why in news?

In an initiative to improve India's weather forecasting, the Ministry of Earth Science (MoES) launched a **high performance computer (HPC) system named Mihir**.

Key facts:

- ◆ The new system will be India's largest HPC facility in terms of peak capacity and performance.
- ◆ It will propel India's ranking from the 368th position to the 30th in the list of top 500 HPC facilities in the world.
- ◆ The country will now also be ranked 4th – after Japan, UK and USA – for dedicated HPC resources for weather/climate community.

Significance of the new HPC facility:

The new HPC facility is expected to improve:

- ✎ Weather forecasts at block level over India which can predict extreme weather events.
- ✎ High resolution seasonal/extended range forecasts of active/break spells of Monsoon.
- ✎ Very high resolution coupled models for prediction of cyclones with more accuracy and lead time.
- ✎ Ocean state forecasts including marine water quality forecasts at very high resolution.
- ✎ Tsunami forecasts with greater lead time.
- ✎ Air quality forecasts for various cities.
- ✎ Climate projections at very high resolution.

This new HPC facility will not only help in meeting the operational requirements of the MoES but also support the research and development activities in MoES and other academic institutions working on various problems related to earth science.

Source: The Hindu

NASA celebrates 60th anniversary of launching first moon to orbit earth**Why in news?**

Commemorating what is widely considered to be the greatest achievement of space exploration, NASA celebrated the 60th anniversary of the launching of the first moon to orbit Earth.

Details:

- ◆ Late in the evening of Jan. 31, 1958, the United States took its first step into space with the launch of the Explorer 1 satellite from Cape Canaveral, Florida.

About Explorer 1 satellite:

- ✎ Explorer 1 was the **first satellite of the United States**, launched as part of its participation in the International Geophysical Year.
- ✎ It was the first spacecraft to detect the **Van Allen radiation belt**.
- ✎ It was a two-metre long satellite carrying a scientific instrument.
- ✎ The main instruments were a cosmic-ray detection package; internal, external and nose-cone temperature sensors; a micrometeorite impact microphone; a ring of micrometeorite erosion gauges; and two transmitters.
- ✎ Electrical power was provided by batteries that made up 40% of the total weight.

Background:

- ☑ The Explorer 1 launch happened in the depths of the Cold War at a time when the US and the Soviet Union were competing for a military and technological edge over one another.
- ☑ The Explorer 1 was not the first object launched into space, as almost a year earlier the USSR successfully put a small metal satellite, Sputnik 1, into orbit.

Source: The Hindu

Blue Moon, Super Moon and Blood Moon**Why in news?**

On January 31st, 2018, a rare event 'Super Moon, Blue Moon and a total lunar eclipse' was experienced over large parts of the globe.

What is Lunar eclipse?

- ◆ A lunar eclipse is a spectacular celestial show, during which the bright, pearly-white disc of the full Moon turns dark, and sometimes takes on the colour of dark copper, or even dried blood.
- ◆ A lunar eclipse occurs when the Sun, the Earth and the Moon are so aligned that for a period of time, the full Moon passes through the shadow of Earth in space (called Earth's Umbra).

Why is it termed Blood Moon or Copper Moon?

- ✎ During a total lunar eclipse, though the Moon gets shadowed by the Earth, sunlight passing through the Earth's atmosphere, break down in its constituent colours and the red part gets scattered by the atmosphere and falls on the Moon's surface, thereby making it take on a reddish copper hue. For this reason since antiquity, a totally eclipsed Moon is called a "Blood Moon".
- ✎ It has no other special relevance other than the fact that the colour of the Moon looks blackish-red.

Why is it called a Blue Moon?

- ✎ This full Moon occurs twice in a calendar month, the last one being on January 2. The next one, on January 31, is termed a "Blue Moon".
- ✎ The Moon does not turn blue but historically the second full Moon of an English calendar month is termed as a Blue Moon. Hence the oft-quoted phrase of a rare occurrence of any event as "once in a Blue Moon".

What is Super Moon?

- ☑ The coming lunar eclipse will be more spectacular because during the eclipse, the Moon will be near its perigee (the Moon reaches its perigee on January 30 at around 15:28 hrs. IST) and hence it will look larger than an average full Moon and is termed a Super Moon.

Source: The Hindu

Government testing LiFi Technology for very high speed internet**Why in news?**

In a recent pilot project, the Ministry of Electronics and Information Technology successfully tested a technology called LiFi (Light Fidelity).

Details:

- ✎ Education and Research Network (ERNET), an autonomous scientific society under the Ministry of electronics and IT, has successfully tested a new technology called LiFi (Light Fidelity) for high speed Internet.
- ✎ This technology can transmit data as high as 10 GB per second over a 1-km radius using LED bulbs and light spectrum.
- ✎ Indications are strong that it will be soon launched in India on a commercial basis.
- ✎ The idea is to connect difficult terrains of the country that can't be reached by fiber but have access to electricity.
- ✎ The technology can be used to connect hospitals where regular internet signals interfere with certain equipment as well as to provide underwater connectivity.
- ✎ One of the biggest use-cases of LiFi could be in the upcoming smart cities in the country, whose underlying theme will be internet of things for modern city management and will be connected by LED bulbs.
- ✎ As the technology uses LED bulbs and light spectrums, it only requires electricity. So, it is easier to use LiFi in place of fiber in many difficult terrains of the country.

Background:

- ✎ This is not the first time when the Indian government has testing alternative technologies. They also tested **WhiteSpace** that uses unused spectrum between television channels to relay data. Google started testing the tech in India using Google's Loon project that also required licensed mobile spectrum. So, the project was opposed by the telecom lobby.

What is Li-Fi?

- ✎ **Li-Fi, or light fidelity**, invented by German physicist and professor Harald Haas, is a wireless technology that makes **use of visible light** in place of radio waves to transmit data at terabits per second speeds—more than 100 times the speed of Wi-Fi.

How it works?

- ✎ Li-Fi is a Visible Light Communications (VLC) system. This means that it accommodates a photo-detector to receive light signals and a signal processing element to convert the data into 'stream-able' content. Unlike Wi-Fi, which uses radio waves, Li-Fi runs on visible light.
- ✎ Here, data is fed into an LED light bulb (with signal processing technology), it then sends data (embedded in its beam) at rapid speeds to the photo-detector (photodiode).
- ✎ The tiny changes in the rapid dimming of LED bulbs are then converted by the 'receiver' into electrical signal.
- ✎ The signal is then converted back into a binary data stream that the user would recognise as web, video and audio applications that run on internet enables devices.
- ✎ An LED lightbulb is a semi-conductor light source meaning that the constant current of electricity supplied to an LED lightbulb can be dipped and dimmed, up and down at extremely high speeds, without being visible to the human eye.

Advantages:

- ✎ Li-Fi could make a huge impact on the internet of things too, with data transferred at much higher levels with even more devices able to connect to one another.
- ✎ Since it does not pollute, it can be called a green technology for device-to-device communication in the Internet of Things (IoT).

Difference between Li-Fi and Wi-Fi:

- ✎ Due to its shorter range, Li-Fi is more secure than Wi-Fi.
- ✎ Li-Fi systems consume less power.
- ✎ Li-Fi offers great promise to overcome the existing limitations of Wi-Fi by providing for data-heavy communication in short ranges.

Limitations of Li-Fi:

- ☑ As visual light can't pass through opaque objects and needs line of sight for communication, its range will remain very restricted to start with. In order to enjoy full connectivity, more capable LED bulbs will need to be placed at various places.
- ☑ Li-Fi requires the lightbulb is on at all times to provide connectivity, meaning that the lights will need to be on during the day.
- ☑ Li-Fi is likely to face interference from external light sources, such as sunlight and bulbs, and obstructions in the path of transmission, and hence may cause interruptions in communication.
- ☑ Also, initially, there will be high installation costs of visual light communication systems as an add-on to lighting systems.

Source: Economic Times

NASA to launch two missions to explore nearest space

Why in news?

U.S. space agency National Aeronautics and Space Administration (NASA) is all set to launch two missions to explore the little-understood area of 96 km above Earth's surface.

The missions are:

1. The **Global-scale Observations of the Limb and Disk (GOLD):**
2. The **Ionospheric Connection Explorer (ICON):**

About GOLD and ICON missions:

GOLD and ICON will team up to explore the ionosphere, a boundary area between Earth and the space where particles have been cooked into a sea of electrically-charged electrons and ions by the Sun's radiation.

- ✎ GOLD mission will be launched aboard a commercial communications satellite in January 2018, and the designed spacecraft ICON will be launched later this year.
- ✎ These layers of near-Earth space are increasingly becoming a part of human domain as it is home to radio signals used to guide airplanes, ships and Global Positioning System satellites.
- ✎ Among others, the missions' goals is to measure how upper atmosphere changes in response to hurricanes and geomagnetic storms.
- ✎ GOLD will also explore how the upper atmosphere reacts to geomagnetic storms, which are temporary disturbances of Earth's magnetic field set off by solar activity. NASA is hoping to find evidences for a theoretical model about El Nino's repercussions on the ionosphere.

Orbits of these missions:

The two missions are complementary.

- ✎ ICON in low-Earth orbit, at 350 miles (560 km) above Earth, flies through and just above the ionosphere, like a close-up camera.
- ✎ GOLD runs in geostationary orbit over the Western Hemisphere, 22,000 miles (about 35,398 km) above the planet's surface. It will build up a full-disk view of the ionosphere and the upper atmosphere beneath it every half hour.

About Ionosphere:

- ☑ The ionosphere is located between 60 and 400 km above the mesopause.
- ☑ It contains electrically charged particles known as ions, and hence, it is known as ionosphere.
- ☑ In this layer temperature starts increasing with height.
- ☑ Radio waves transmitted from the earth are reflected back to the earth by this layer and is used for radio propagation to distant places on the Earth.

Source: The Hindu

WHO approves Indian typhoid vaccine Typbar-TCV for global use

Why in news?

Recently, the World Health Organisation (WHO) has given its pre-qualification to Typbar Typhoid Conjugate Vaccine (TVC) developed by Hyderabad based Bharat Biotech for global use.

- ◆ The WHO pre-qualification enables procurement and supplies of this life-saving vaccine to UNICEF, Pan-American Health Organisation (PAHO) and GAVI (vaccine alliance) supported countries.
- ◆ This also paves the way for WHO member countries to introduce the Typbar TCV into their immunization programs.

About Typbar TCV:

Typbar TCV is world's first typhoid vaccine clinically proven to be administered to children from six months of age to adults, and confers long-term protection against typhoid fever.

- ✎ A single dose offers 87% protective efficacy against typhoid.
- ✎ TCVs are innovative products having longer-lasting immunity than older vaccines and require fewer doses.
- ✎ They can be given to young children through routine childhood immunization programs.
- ✎ TCVs have been recommended by WHO's Strategic Advisory Group of Experts on Immunization (WHO-SAGE).

About Typhoid:

- ✎ Typhoid fever is caused by bacterium Salmonella Typhi (S. Typhi).
- ✎ It infects humans due to contaminated food and beverages from sewage and other infected humans.
- ✎ Its symptoms include fever, fatigue, headache, abdominal pain, and diarrhoea or constipation.

Background:

- ✎ According to International Health Metrics and Evaluation (IHME) estimates in 2016, there were approximately 12 million cases of typhoid fever resulting in around 130,000 deaths.
- ✎ Currently, a third of global population is at risk of typhoid fever, which results in loss of work and wages, lowered pregnancy outcomes and impaired the physical and cognitive development of children.
- ✎ Urbanisation and climate change have potential to further increase global burden of typhoid.

What is GAVI?

Gavi is an international organisation – a global Vaccine Alliance created in 2000.

- ✎ It brings together public and private sectors with the shared goal of creating equal access to new and underused vaccines for children living in the world's poorest countries.
- ☑ It also brings together developing country and donor governments, the World Health Organization, UNICEF, the World Bank, the vaccine industry in both industrialised and developing countries, research and technical agencies, civil society, the Bill & Melinda Gates Foundation and other private philanthropists.

Source: The Hindu

Government approves purchase of guided bombs, Barak missiles**Why in news?**

131 Recently, the Centre has approved the purchase of 240 **precision-guided bombs from Russia** and **Barak missiles from Israel**.

- ◆ The procurement of bombs will address the deficiency of Precision Guided Munitions in the Indian Air Force arsenal, besides enhancing the offensive capabilities of the IAF.
- ◆ The surface-to-air Barak missiles for the Indian Navy will be used as a ship-borne anti-missile defence system against anti-ship missiles.

Background:

- ✎ In May 2016, the Cabinet had approved the **strategic partnership model** to allow domestic private companies to form joint ventures with foreign defence equipment manufacturers.

Barak 8:

Barak 8 is the next-generation surface-to-air missile (SAM) system, jointly developed by Israeli Aerospace Industries, Rafael and DRDO. Bharat Dynamics Limited (BDL) produce the missiles.

- ✎ Barak missiles are designed to defend against any type of airborne threat including aircraft, helicopters, anti-ship missiles, and UAVs as well as ballistic missiles, cruise missiles and combat jets.
- ✎ Both maritime and land-based versions of the system exist.

What is precision-guided munition?

A Precision Guided Munitions (PGM) is a **missile, bomb or artillery shell equipped with a terminal guidance system.**

- ☑ It contains electrical equipment that guides it in the last phase before impact. The terminal guidance unit is designed to sense emitted or reflected EMR (electromagnetic radiation) within its field of view.
- ☑ With guided weapons, fewer air crews are put at risk, less ordnance spent, and collateral damage reduced.
- ☑ The creation of precision-guided munitions resulted in the retroactive renaming of older bombs as unguided bombs or “dumb bombs”.

Source: The Hindu, Live Mint

China to become world's first country to launch a lunar probe on far side of moon

Why in news?

Recently, **China has announced its plans to launch a lunar probe in 2018 to achieve the world's first soft landing on the far side of the moon to showcase its ambitious space programme.**

- ◆ The mission is called Chang'e 4 project.

About the mission:

Chang'e 4 is the fourth mission in the country's lunar mission series which is being named after the Chinese moon goddess.

- ✎ A Long March 4C rocket will start its course to 60,000 kilometers behind the moon carrying a 425-kilogram relay satellite. This relay satellite will act as an initial communication link between earth and the lunar far side.
- ✎ Once China's space agency succeeds in establishing the link, China will trigger the second part of the mission i.e. sending a lander and rover to the unexplored region of the moon.

Significance of the mission:

- ✎ The far side of the moon known as 'South Pole-Aitken Basin' still remains a mystery among space scientists and by sending a probe there, China will outdo the historical achievements of the US and USSR.
- ✎ According to experts, landing on the far side of the moon is undoubtedly one of the most challenging missions ever launched by any of the world's superpowers.

Obstacles in this mission:

- ✎ Communication difficulties will be the main problem faced by the Chinese team as they try to land on the other side of the moon.

China is expected to consider using options like radio telescopes developed by Heino Falcke of Radboud University to communicate in the absence of a transmitting medium.

Background:

- ☑ China began their lunar exploration program in 2007 by launching a simple lunar orbiter named 'Chang'e 1'.
- ☑ The second mission in the program named 'Chang'e 2' was launched in 2010, and it was later followed by the third mission 'Chang'e 3'.
- ☑ 'Chang'e 3' made headlines all around the world as it marked the first soft moon landing since 1976.

Source: The Hindu

First for forest produce, GI tag for Nilambur teak

Why in news?

Nilambur teak, known internationally for its superior timber quality and appearance has been accorded the Geographical Indication (GI) status by the GI registry, Chennai.

- ◆ It is the **first time that a forest produce was added to the list of products with GI tag.**
- ◆ The Intellectual Property Rights (IPR) Cell of the Kerala Agricultural University along with Nilambur Teak Heritage Society are responsible for the recent bestowing of the GI tag.

What does a Geographical Indication tag entail for Nilambur teak?

- ✎ The GI tag states that this type of wood originates and is a product of, the Nilambur taluk of Kerala.
- ✎ Those who sell other types of wood under the guise of Nilambur teak will be blocked from the market, thereby protecting native cultivators, who had previously lost out because of competitive pricing.
- ✎ Revenues generated from Nilambur teak will be higher, because cultivators can now fetch good prices for the trees.

Significance of GI tag to Nilambur teak:

- ✎ There are about 10,000 people including workers and traders who are dependent on teak for their livelihood, and the GI tag will fetch them good revenues, as it will block sale of fake products.

About Nilambur teak:

- ✎ Britishers were first to identify the superior and unique quality of teak from Kerala's Nilambur plantations and forests. Later, the region became the major supplier of quality teak in the world.
- ✎ Nilambur was christened the **Mecca of Teak.**
- ✎ Due to its superior mechanical and physical properties as well as aesthetic appearance, the teak was exported to England and other parts of the world.
- ✎ However, as the fame of Nilambur teak increased, fake products with false tags also started flooding the wood and furniture markets.

Key features of Nilambur teak:

- ✎ Nilambur teak is famous for its large size, superior colour and durability.
- ✎ Durability of Nilambur teak is attributed to the synergistic effect of its components and is also known for its resistance to fungal decay as well as for hydrophobicity, anti-oxidant properties and oily nature.

What is a geographical Indication?

- ☑ A geographical indication (GI) is a name or sign used on certain products which corresponds to a specific geographical location or origin (e.g. a town, region, or country).
- ☑ India, as a member of the World Trade Organization (WTO), enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999 has come into force with effect from 15 September 2003.
- ☑ GIs have been defined under Article 22(1) of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement as: "Indications which identify a good as originating in the territory of a member, or a region or a locality in that territory, where a given quality, reputation or characteristic of the good is essentially attributable to its geographic origin.
- ☑ The GI tag ensures that none other than those registered as authorised users (or at least those residing inside the geographic territory) are allowed to use the popular product name.

Source: The Hindu, wiki

Allied Health Professionals Database Portal**Why in news?**

The Union Ministry of Health and Family Welfare has launched Allied and Healthcare Professional (APH) Database portal to make data repository robust to ensure better systems and frameworks for healthcare workforce in country.

About the Allied and Healthcare Professional (APH) Database portal:

- ☒ The AHP portal has a capacity of capturing more than 10 lakh Allied and Healthcare Professionals' (AHP) data.
- ☒ The database will help government to track the number of professionals and streams of allied and health care professions in the country.
- ☒ It will be helpful in expediting envisaged processes viz. licensing of professionals, workforce policy planning, and bringing transparency in system by maintaining standards of educational and clinical practice etc.

What is Allied Health?

- ☒ Allied health may be defined as those health professions that are distinct from medicine and nursing.

Who are Allied Health professionals?

- ☑ Allied Health professionals are involved with the delivery of health or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management, among others.
- ☑ Allied health professionals, to name a few, include dental hygienists, diagnostic medical sonographers, dietitians, medical technologists, occupational therapists, physical therapists, radiographers, respiratory therapists, and speech language pathologists.

Source: PIB

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) crosses one crore mark**Why in news?**

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) has crossed one crore mark in antenatal check-ups.

Performance of the scheme:

- ☒ The programme has been successful in reaching out to the difficult and remote areas of India, since out of the 1 crore checkups across the country, more than 25 lakh check-ups were conducted in high priority districts identified by the Health Ministry for focussed attention.

- ✎ While all States/ UTs have made significant efforts to reach out to pregnant women,
- ✎ Maharashtra has reported the largest number of check-ups among the Non-Empowered Action Group (EAG) States and Rajasthan has reported the largest number of check-ups among the Empowered Action Group States.

About Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):

Aim:

- ✎ The scheme aims to provide pregnant ladies free ante-natal services (ANC) and required treatment for free on 9th of every month.

Objectives:

Objectives of the scheme are:

1. Provide healthy life to the pregnant women.
 2. Lowering the maternity mortality rate.
 3. Making pregnant women aware of their health issues and diseases.
 4. Making sure safe delivery and healthy life of the baby.
- ✎ The scheme is applicable only for the pregnant women in their pregnancy period of 3 to 6 months.

Facilities:

- ✎ The scheme will provide all kinds of medical checkups completely free to pregnant women. These checkups will take place at the medical centres, government and private hospitals and private clinics across the country.
- ✎ These free of cost tests will include blood pressure, sugar level, weight, haemoglobin test, blood test and screening.
- ✎ Women will be marked differently using different colour stickers based on their health problems so that doctors can easily detect the problem. Different colour stickers will be Red Sticker for Serious patients, Blue Sticker for High blood pressure and Yellow Sticker for Other diseases.
- ✎ **'IPledgeFor9' Achievers Awards** have been devised to celebrate individual and team achievements and acknowledge voluntary contributions for PMSMA in states and districts across India.

Rationale for the program:

- ✎ Data indicates that Maternal Mortality Ratio (MMR) in India was very high in the year 1990 with 556 women dying during child birth per hundred thousand live births as compared to the global MMR of 385/lakh live births.
- ✎ As per RGI- SRS (2011-13), MMR of India has now declined to 167/lakh live births against a global MMR of 216/lakh live births (2015). India has registered an overall decline in MMR of 70% between 1990 and 2015 in comparison to a global decline of 44%.
- ✎ While India has made considerable progress in the reduction of maternal and infant mortality, every year approximately 44000 women still die due to pregnancy-related causes and approximately 6.6 lakh infants die within the first 28 days of life. Many of these deaths are preventable and many lives can be saved if quality care is provided to pregnant women during their antenatal period and high risk factors such as severe anemia, pregnancy-induced hypertension etc are detected on time and managed well.

What are the Empowered Action Group (EAG) states?

In India, the **eight socioeconomically backward states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh**, referred to as the Empowered Action Group (EAG) states, lag behind in the demographic transition and have the highest infant mortality rates in the country.

Source: PIB



Summary of the Monthly Journals

Rural Banking Translating Vision to Reality

As the Father of our Nation said, 'India lives in village'. Rural Development is the sine qua non of the overall development of India. Since independence, it has been the constant endeavour of our policy makers to give adequate thrust to bringing rural prosperity in India. During the last 70 years of independence, beginning with cooperative credit structure, followed by nationalization of public sector banks (PSBs) and expansion of their branch network in rural areas and then launching of Regional Rural Banks in 1976 the formal rural institutional structure has grown and expanded many-fold. Unfortunately, in spite of these expansion programmes, the large segment of our rural population, is still 'financially excluded', still under the clutches of money-lenders, which of course, is a matter of grave concern.

Even today, the country is home to 24 per cent of the world's unbanked adults and about two-thirds of South Asia's. About 31 crore 'potentially bankable rural Indians do not have access to formal banking service. As on June 30, 2016, as reported by SLBCs, out of 6,00,000 villages have been provided banking services; 14,976 through branches, 4,16,636 through BCs and 20,539 by other modes viz. ATMs, mobile vans, etc. What is more, the poor physical and social infrastructure also impacts the access to electrification of rural India.

With an average rural literacy rate of 71 per cent most rural Indians are not likely to sacrifice an entire day's wage to travel to a bank branch which is open between 10.00AM to 5.00PM. Intermediaries like NGOs, Self-help Groups, Micro Finance Institutions, semi-formal delivery channels like Banking Correspondents and Business Facilitators, are being used by banks to improve access to credit and savings. However, these channels in their current form, offer limited services and suffer from many lacunae.

Apart from this, many banks view the rural market as a regulatory requirement rather than as an economic opportunity. Some of its obvious reasons are-

Since rural households have irregular income and expenditure patterns, the banks have high non-performing loans in rural areas. The issue is compounded by the dependence of the rural economy on vagaries of monsoons. The loan waivers driven by political agenda, further aggravate the bankers' woes.

The average ticket size of both a deposit transaction and a credit transaction in villages is small, which means the banks need more customers per branch or channel to break-even. Since many rural folks are not comfortable using technology-driven channels like ATMs, phone banking or internet banking, hence mostly dependent on bank branches, leading to banks' high cost to serve.

The highly irregular and volatile income streams and unscheduled expenditure like medical or social emergency, attribute to higher risk of credit for the banks. While poorer groups might need basic savings services and micro-credit to cover production costs and emergency expenses, farmers and farmers' organisations require larger amounts of credit to finance production, inputs, processing and marketing besides risk mitigation products, for example, insurance for loss of life and assets.

The new rural finance paradigm needs to be based on the premise that 'rural people are bankable' and rural clientele is not limited only to the farmers and uneducated but also includes a generation which can use and adopt technology, and hence, a demand-driven design and efficient provision of multiple financial products and services through an inclusive financial sector comprising sustainable institutions serving a diverse rural clientele, is the need of the hour. Thus, developing an inclusive yet sustainable rural financial

system is extremely challenging and involves comprehensive understanding of the host of complementary issues, which can be placed in seven broad categories-

- ◆ **Product strategy:** For catering to the varied needs of small ticket size transactions, whether a chunk of diversified products and services can be developed without compromising on the flexibility, continuous availability and convenience of the products? which types of financial products have the greatest impact on reducing poverty and lifting growth rates in deprived rural areas?
- ◆ **Processes:** What kinds of business processes can help banks to reach deprived and vulnerable segments and provide hassle-free near doorstep service to the customers without endangering financial viability? How do we design an efficient hub and spoke model to overcome the hurdles in the agentled branchless banking?
- ◆ **Partnerships:** What are the constraints faced by the unbanked and underbanked people in accessing financial services from different types of service providers? Are the bank-non-bank partnerships, such as, Business Correspondents, SHGs, MFIs, etc. working efficiently in easing the accessibility and availability of financial services?
- ◆ **Protection:** What measures and mechanisms are needed to protect both the providers and the receivers of rural finance from abuse and enough risks mitigants are there for the borrowers given the higher vulnerability in the sector? Are lenders protected against ebb and flow of uncertainty in credit culture?
- ◆ **Profitability:** Whether the business strategies and delivery models are geared to provide affordable and acceptable services to the rural clientele while ensuring that rural finance service providers function profitably on a sustained basis? How do we tap into the customer willingness to pay through an appropriate pricing model?
- ◆ **Productivity:** How do we increase the productivity of financial services provided in the rural areas? What are the strategies needed to synergize other resources with finance (say, under a "credit plus" approach to ensure more productive and optimal use of financial services)?
- ◆ **People:** Are the rural branch staff well-equipped to meet the needs of driving the process of financial inclusion in terms of knowledge, skill and attitude? Do these people have the capacity, comprehension and commitment to identify potential customers multiple banking?

As Nelson Mandela said, "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little". So now, let us appear in this test by dwelling upon the initiatives taken by our government with a view to addressing the challenges of rural banking.

Let us conclude with the hope that we remain committed to creating a conducive regulatory environment where financial entities can ensure hassle free financial services to the poor without jeopardising financial stability. Contextually, banks may be given the freedom to determine their own financial inclusion strategies as part of their overall business philosophy and pursue it as a commercial activity, taking on board their risk appetite and product sophistication. With a couple of financial service providers, and especially an erstwhile microfinance service provider, allowed to become banks and with the possible introduction of on-tap licensing of small banks and payment banks in the context of priority sector requirements, it is hoped that size and scope of the rural financial system landscape will expand and thereby, address the persistent and emerging challenges relating to rural finance and thus substantially improve the lot of rural folks, both qualitatively and quantitatively. Let us look forward to translating the underlying vision of Rural Banking into reality.

Source: Yojana

Empowering Rural Women: The Way Forward

The Rural women constitute a large proportion of population in rural India. Poverty is particularly acute for women living in rural households. Women's poverty is directly related to the absence of economic opportunities and autonomy. Poor access to economic resources, education and support services results in their low participation in the decision-making processes. Rural women are not a homogenous category and thus, have different location specific needs. Goal of inclusive and sustainable development cannot be

reached without addressing these diverse needs. Rural women experience inequalities in healthcare and nutrition, have lower access to employment, lack ownership of property and are also victims of domestic violence. Yet, they take disproportionate responsibility for housework and child-care as compared to men. This asymmetrical division of labor, rights and assets renders them more vulnerable. It makes them more susceptible to stress and deprivation brought through disasters. Rural women who constitute 66 per cent of total labour in farm production and livestock related activities have little role in marketing or selection of either livestock or their crop. Market economy trends in the era of globalization have further widened the gap between educational and technological opportunities available for rural women.

There also exists a large divide between rural and urban women. Though, work participation rate of rural women is higher than their urban counterparts, higher work participation rates per se do not indicate a higher level of welfare such as higher educational capabilities and/or asset and income. In fact, the situation is quite dismal for rural women especially for women belonging to SCs/STs and other vulnerable/marginal categories. Work participation rate of female workers in rural areas was higher which stood at 30 per cent as compared to the work participation rate of only 15.4 per cent in urban areas as per Census, 2011. Most of the rural women are engaged in the unorganized sector, agriculture & allied activities, microenterprises etc. These activities are drudgery-based and low income. Digital technologies have further deepened this gap due to poor digital literacy among rural women as compared to urban women.

Rural women in India are concentrated in agriculture to a much larger extent than men. With around 60 per cent of India's population engaged in farming, women contribute to almost 70-80 per cent of farming activities but are neither legally, nor socially recognized as farmers. There is significant gender segmentation of operations in agriculture. While men predominate in activities such as ploughing and harvesting which have largely become mechanized these days, women predominate in activities like, weeding, transplanting and inter-cropping that involve more drudgery. Technological implements are either not available, or women have little access to them.

Challenges for rural women

Some other key challenges faced by these rural women include:

- ◆ **Poor education:** Major attribute of rural women is their low level of educational attainment. Rural women often suffer from high illiteracy rates and high drop-out rates from schools. Lack of education impedes their participation in other development processes of the country. Poor knowledge on legal rights hampers the social and political empowerment of rural women. Illiteracy also impedes their access to skill up-gradation and capacity building programs, access to credit, access to subsidies on inputs provided by government programs, access to technologies and related training modules offered by the agriculture extension system and their decision making power. For example, women are engaged in all types of farm activities and do more work as compared to male workers, but their participation in decision making related to farm and income generating activities is low. They do not enjoy autonomy in decision making in the family or matters relating to children's education and occupation in spite of their significant contribution to economic activities. Poor access to safe spaces in rural areas specifically due to lack of good roads, transport and lighting facilities at night also hampers their access to education despite the presence of schools/colleges.
- ◆ **Digital literacy:** Poor access to Information Technology (IT) by rural women intensifies existing inequalities between women and men and also creates new forms of inequalities in education and health. This also leads to emergence of new forms of violence against women and widen the existing gender digital divide. Digital literacy has the capacity to empower rural women by raising social and political awareness, improving educational and employment opportunities.
- ◆ **Poor access to technologies:** Access to women friendly technologies/implements and services by the government schemes/agricultural extension is poor. The studies carried out so far in the field of agriculture indicate that despite the key role of women in crop husbandry, animal husbandry, fisheries, forestry and post-harvest technology, those in charge of formulating packages of technologies, services and public policies for rural areas have often tended to neglect the productive role of women. There is inadequate development with respect to technologies specifically tailored to women-specific occupations. Besides, involvement of women in technology development and transfer has also received poor attention from both scientific and administrative wings of the government.

- ◆ **Lack of skills:** While rural women are involved in micro/small enterprises or manufacturing, most training programmes hardly have any female participation. There is often less involvement of women in opportunities related to construction, trade, transport, storage, and services due to lack of skills.
- ◆ **Vulnerability to climate change:** Rural women are affected differently, and often more severely by climate change and its associated natural disasters such as floods, droughts, cyclones and storms. The effect of climate change drives rural women into dangerous situations/risks and vulnerabilities.
- ◆ **Lack of convergence between various Government programmes:** Substantial public investments have been made for strengthening of the rural economy and the livelihood base of women. There are number of programmes/schemes/incentives by various Government departments/Ministries for farm women.

Due to lack of adequate convergence among the various schemes implemented by various Ministries, particularly, Ministry of Agriculture, Ministry of Rural Development and Ministry of Women and Child Development, empowerment of rural women remains scattered and isolated. Lack of convergence among these government programmes/schemes not only impedes entitlements to reach the needy rural women, but also impedes optimization of efforts and resources of the government.

Empowered rural women can play an important role in linking other women and girls to their entitlements such as access to nutritious food and supplements, equality in participation of women in government programs such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), National Rural Livelihood Mission (NRLM), PM Aawas Yojna (PMAY), and creches for women at working sites etc. They can also play an important role in bringing about a mindset change towards the value of girl child by actively associating themselves with programmes such as Beti Bachao Beti Padhao (BBBP), Swachh Bharat Abhiyan etc.

For holistic empowerment of rural women to happen, an effective convergence of all aspects impacting a women's life is needed - be it social, economic or political. The process of empowering rural women is a continuous process. The need of the hour is to make women realise their potential, make them aware of the bright future that awaits them, guide them and nurture them.

Source: kurukshetra