



PabulumIAS
..... intellectual nourishment

AN INSTITUTE FOR CIVIL SERVICES EXAMINATION PREPARATION

CURRENT AFFAIRS

MARCH- 2017

Source:

- The Hindu,
- Livemint.
- Business Standard,
- PIB,
- The Indian Express,

F-9, Main Road, Katwaria Sarai (Behind Mother Dairy) New Delhi-16.
Ph. 011-41661163, Mob. 9711713852, 9873987698, 9811109103.
E.mail: pabulumias@gmail.com | www.pabulumias.com

CURRENT AFFAIRS : MARCH 2017

(Sources: The Hindu, The Indian Express, Business Standard, PIB, Livemint)

1st Mar. 2017

GS : 1 - ART AND CULTURE

Copper axes point to an ancient culture story

(The Hindu)

Why in news?

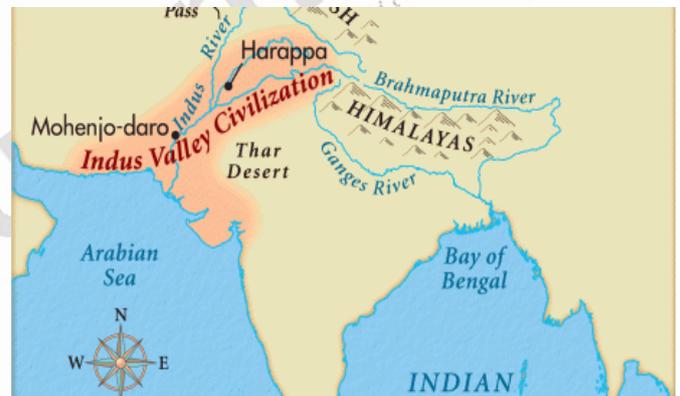
- Six copper axes and some pieces of pottery discovered in Sakatpur of Saharanpur district in Uttar Pradesh
- It could point to a separate culture that straddled the Ganga and Yamuna, coinciding with the Indus Valley Civilisation.

Key points:

- When the Indus Valley civilisation flourished in what is today Punjab, Haryana and parts of Pakistan, a parallel culture is thought to have co-existed in the fertile plains between the Ganga and the Yamuna in western Uttar Pradesh.
- The copper axes and pottery sherds found may be related to the Ochre Coloured Pottery (OCP) culture in the doab (plains) of the two rivers in the late Harappan period, around 2000 BC.
- OCP marked the last stage of the North Indian Copper Age.
- The people who used ochre pottery and their culture are specific to the doab region.
- The first remnants of OCP culture were found in Hastinapur, in Meerut district, in 1951 and later in Atranjikhera in Eta district.

Ochre Coloured Pottery (OCP) culture:

- The Ochre Coloured Pottery culture (OCP) is a 2nd millennium BC Bronze Age culture of the Indo-Gangetic Plain (Ganges-Yamuna plain).
- It is a contemporary of and successor to the Indus Valley Civilization.
- The OCP marked the last stage of the North Indian Bronze Age and was succeeded by the Iron Age black and red ware culture and the painted gray ware culture.
- Early specimens of the characteristic ceramics found near Jodhpura, Rajasthan date from the 3rd millennium. (This Jodhpura is located in the district of Jaipur and should not be confused with the city of Jodhpur).
- The culture reached the Gangetic plain in the early 2nd millennium.



GS : 2 - GOVERNMENT POLICIES AND INTERVENTIONS

India signs Financing Agreement with World Bank for US\$ 63 Million for Tejaswini

(PIB)

- A Financing Agreement for IDA credit of US\$ 63 million (equivalent) for the “Tejaswini” Socio-Economic Empowerment of Adolescent Girls and Young Women Project” was recently signed between India and the World Bank.

Tejaswini:

- Tejaswini aims for Socioeconomic Empowerment of Adolescent Girls and Young Women (AGYW) Project in India is to improve completion of market-driven skills training and secondary education for adolescent girls and young women in select districts of Jharkhand.
- The project seeks to empower the adolescent girls with basic life skills and thereafter provide further opportunities to acquire market driven skill training or completion of secondary education, depending on the inclination of the beneficiary.
- The project will be delivered in 17 Districts of Jharkhand.
- The project has three main components,
 1. Expanding social, educational and economic opportunities

- 2. Intensive service delivery
- 3. State capacity-building and implementation support.
- About 680,000 adolescent girls and young women in the project Districts are expected to benefit from the program.

GS : 3 - INFRASTRUCTURE

Minister for Civil Aviation Dedicates First Integrated Heliport to the Nation

(PIB)

- The First Integrated Heliport was dedicated to the Nation by Ministry of Civil Aviation in association with Pawan Hans today at Rohini Heliport, Delhi.
- The facility will be useful in providing medical emergency, public safety and enhancing tourism.
- Helicopter services could become economically viable if the prevailing 25% tax on ATF was reduced.
- It is part of National Aviation Policy to have four heliports, one in each region and Rohini’s heliport is the first step.
- The Rohini heliport has been completed in almost two years at a cost of nearly 100 crores.
- This Heliport will provide all helicopter operational facilities and will decongest busy Indira Gandhi International Airport, and also promote Regional Air connectivity through helicopters in the northern part of the country for regular passenger services, heli services, landing & parking of helicopters, Helicopters Maintenance Services (MRO), disaster management, helicopter emergency medical services (HeMS), law & order surveillance.
- The Heliport consists of a terminal building having capacity of 150 passengers, 4 hangers with parking capacities for 16 helicopters and 9 parking bays.
- Regional connectivity will be fully achieved when we are able to connect at least all capital cities with district headquarters by air, which can be made possible only by combination of smaller planes and helicopters for seamless connectivity.

Way forward:

- PHL is working on its business diversification and has devised a Strategic Plan - 2020 according to which company will be diversifying into small fixed wing and seaplane operations; Maintenance, Repair and Overhaul (MRO) business and development of helipads and Heliports.
- It is working to develop four “heli-hubs” in line with the concept lines of the “Airport-Hubs” and Rohini is the First step into this series.
- These heli-hubs will be a one-point solution for the helicopter business and will act as a heliport for public passenger services, MRO facility for helicopter maintenance and also as a skill development centre for training of pilots, AMEs and technicians.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

Madras HC orders TN govt to enact law on removal of seemaikaruvelam trees

(The Hindu)

Why in news?

- The Madurai bench of the Madras high court has directed the Tamil Nadu government to enact a law with prohibitory and penal clauses within two months to eradicate seemaikaruvelam trees (prosopisjuliflora).
- The seemaikaruvelam tree that sucks a lot of water has invaded into water bodies and dry lands of government and private people. Since such trees ultimately affect the agricultural activities, a batch of cases for their eradication was filed before the high court bench.

Seema Karuvelam trees:

- The Karuvelam tree, or prosopisjuliflora as its known biologically, is a species native to West Africa and was brought to Tamil Nadu in 1960s as fuel wood.
- Slowly, these seeds started drifting into dams and rivers, causing problems.
- Apparently, the plant is such that no other species can co-exist with it, and it has already caused drying up of several water bodies in the state, adding to the woes of the water-starved state.
- According to a report, Karuvelam tree absorbs more than four litres of water to obtain one kilogram of biomass.
- It cannot even shelter birds as it produces less oxygen and more carbon dioxide.

- If it does not have sufficient water it begins absorbing groundwater. And if there is no groundwater, it starts absorbing humidity from the surroundings.
- It can also turn the groundwater poisonous.

GS : 1 - URBANISATION AND DEVELOPMENT ISSUES

Thiruvananthapuram tops city governance ranking

(The Hindu)

- The report of the Annual Survey of India’s City-Systems (ASICS), conducted by Janaagraha Centre for Citizenship and Democracy, was recently released.
- This is the fourth edition.
- The survey evaluated 21 major cities from the country’s 18 states.
- The survey highlighted inadequacies in urban governance that could affect public service delivery and quality of life.

Key points of survey:

- Thiruvananthapuram is at the first place. Pune is ranked second, up two ranks from 2015, while Kolkata retains its third slot.
- Delhi slips two places to rank ninth. The biggest gainer in the 2016 survey is Bhubaneswar, which has jumped eight places from 2015 to land at the 10th spot.

About the survey:

- The ASICS report is designed to help city leaders pin point issues in urban governance in their cities and help them chalk out a reform roadmap to make them more livable.
- The better a city scores in the survey, the more likely it is that it will be able to deliver better quality of life to citizens over the medium and long-term.
- The survey showed that Indian cities score between 2.1 and 4.4 on scale of 10, as against the global benchmarks of London and New York, which score 9.3 and 9.8 respectively.
- These low scores imply that Indian cities need to strengthen their city-systems – quality of laws, policies and institutions significantly to improve service delivery and deliver a high quality of life to citizens.

MISCELLANEOUS

National Commission for Scheduled Tribes (NCST)

- NCST was established by amending Article 338 and inserting a new Article 338A in the Constitution through the Constitution (89th Amendment) Act, 2003.
- By this amendment, the erstwhile National Commission for Scheduled Castes and Scheduled Tribes was replaced by two separate Commissions namely-
 1. The National Commission for Scheduled Castes (NCSC)
 2. The National Commission for Scheduled Tribes (NCST).
- The term of office of Chairperson, Vice-Chairperson and each member is three years from the date of assumption of charge.
- The Chairperson has been given the rank of Union Cabinet Minister and the Vice-Chairperson that of a Minister of State and other Members have the ranks of a Secretary to the Government of India.
- NCST is empowered to investigate and monitor matters relating to safeguards provided for STs under the Constitution or under other laws or under Govt. order.
- The commission submits its report to the President annually on the working of safeguards and measures required for effective implementation of Programmers/ Schemes relating to welfare and socio-economic development of STs.

White shipping information

- It refers to exchange of relevant advance information on the identity and movement of commercial non-military merchant vessels.

2nd Mar. 2017

GS : 2 - SOCIAL (PROBLEMS RELATED TO MIGRANTS)

A Government Panel recommends legal framework for protection of interests of migrants in the country (PIB)

- A Government appointed Panel has recommended necessary legal and policy framework to protect the interests of the migrants in the country.
- Panel headed by Shri Partha Mukhopadhyay.
- Panel stating that the migrant population makes substantial contribution to economic growth and their Constitutional rights need to be secured.

Key recommendations:

- The Working Group has recommended that the Protocols of the Registrar General of India needs to be amended to enable caste based enumeration of migrants so that they can avail the attendant benefits in the States to which migration takes place.
- It also recommended that migrants should be enabled to avail benefits of Public Distribution System (PDS) in the destination State by providing for inter-State operability of PDS.
- Referring to Constitutional Right of Freedom of Movement and residence in any part of the territory of the country, the Group suggested that States should be encouraged to proactively eliminate the requirement of domicile status to prevent any discrimination in work and employment.
- States are also to be asked to include migrant children in the Annual Work Plans under Sarva Siksha Abhiyan (SSA) to uphold their Right to Education.
- It also suggested that migrants should be enabled to open bank accounts by asking banks to adhere to RBI guidelines regarding Know Your Customer (KYC) norms and not insist on documents that were not required.
- The Group suggested that the hugely underutilized Construction Workers Welfare Cess Fund should be used to promote rental housing, working Women Hostels etc., for the benefit of migrants.

Present status of migrants:

- Quoting data of Census 2011 and National Sample Survey Organisation (NSSO), the Group stated that migrants constitute about 30% of the country's population and also of the total working force.
- The recent Economic Survey noted that annual migration in the country increased from 3.30 million in 2011 to 9.00 million in 2016.

GS : 3 - SCIENCE AND TECHNOLOGY

Indian Navy successfully test-Fires anti-ship missile from Kalvari Submarine

(The Hindu)

- Indian Navy successfully test-fired an anti-ship missile for the first time from an indigenously built INS Kalvari submarine.

Key points:

- INS Kalvari is the first of India's six Scorpene-class submarines which are being built under the Project 75.
- It has been designed by France's DCNS and was manufactured at state-owned Mazagon Dock Limited in Mumbai, Maharashtra.
- The anti-ship missiles will provide the Kalvari class submarines ability to neutralize surface threats at extended ranges.

Scorpene-class submarines:

- The diesel powered Kalvari (Scorpene) class submarines have superior stealth.
- They use guided weapons such as tube-launched anti-ship missiles and torpedoes on enemy submarines from the surface or underwater.
- Besides warfare, they can perform varied functions will include intelligence gathering, mine laying and area surveillance etc.
- The second Kalvari class submarine INS Khanderi was launched in Mumbai in January 2017.
- The other four submarines are expected to be launched at nine-month intervals.

GS : 2 - GOVERNMENT INTERVENTIONS

Government notifies Specified Bank Notes (Cessation of Liabilities) Act, 2017

(The Hindu)

- The Union Government has notified the Specified Bank Notes (Cessation of Liabilities) Act, 2017 to prohibit the holding, transferring or receiving of scrapped old Rs.500 and Rs. 1000 currency notes from 31 December, 2016

Key points:

- This law makes possession of more than a certain number of the old Rs. 500 and Rs. 1,000 notes a criminal offence.
- It ends the liability of the Reserve Bank of India (RBI) and the government on the demonetised Rs.500 and Rs. 1000 currency notes.
- It prohibits the holding, transferring or receiving of demonitised notes from 31 December, 2016 and confers power on the court of a first class magistrate to impose the penalty.
- Possessing more than 10 pieces of old notes by individuals and more than 25 pieces for study, research or numismatics purposes will attract a fine of Rs. 10,000 or five times the value of cash held, whichever is higher.
- Fine of a minimum of Rs, 50,000 will be imposed for a false declaration by persons for being abroad during the demonetisation period.

GS : 3 - SCIENCE AND TECH (DEFENCE)

Supersonic interceptor missile successfully test-fired

(Indian Express)

- Indigenously developed supersonic Advance Area Defence (AAD) interceptor missile was successfully test-fired from launch complex III of the Integrated Test Range (ITR) at Abdul Kalam Island in Balasore, Odisha.
- The supersonic interceptor missile is capable of destroying any incoming enemy ballistic missile at low altitude.
- The successful test validates the reliability of its two layered Ballistic Missile Defence (BMD) system.

Key Features of missile:

- The AAD interceptor missile has been indigenously developed by DRDO.
- It is a 7.5-metre-long single stage solid rocket propelled guided missile.
- It is equipped with a navigation system, a hi-tech computer, inertial navigation system and an electro-mechanical activator.
- It can destroy the incoming hostile ballistic missile in the endo-atmospheric region (less than 30 km altitude) at a low altitude of less than 30 kms.

About India's BMD programme:

- The Research Centre Imarat (RCI) of the DRDO has played pivotal role in the development of all strategic missiles, spearheaded under the India's double-layered ballistic missile defence (BMD) programme.
- The BMD consists of two interceptor missiles, Advanced Area Defence (AAD) missile for endo-atmosphere or lower altitudes and Prithvi Defence Vehicle for exo-atmospheric ranges.
- The DRDO expects deployment of BMD shield by 2022.
- India will be fourth country in the world after the US, Russia and Israel to successfully built effective anti-ballistic missile system.
- Earlier in February 2017, DRDO had successfully carried out test of the exo-atmospheric Pirthivi interceptor missile destroying the target outside the earth's atmosphere at an altitude of over 85 km

GS : 2 - SOCIAL (HEALTH)

Haldi And Litchi Controversy (How haldi and litchi have cooked up a storm)

(The Hindu)

Why in news?

- Two stories have renewed discussions on scientific rigour and ethics. The stories were around haldi (turmeric) and litchi.

Haldi controversy:

- The substance that gives haldi its bright yellow hue is curcumin.
- They have innumerable virtues like anti-inflammatory, anti-malarial, anti-cancer and, as a piggyback on

nanofibres to regenerate bone tissues.

- Recently, American scientists have debunked the medicinal value of curcumin in a reputed journal.
- They concluded that there was no evidence regarding therapeutic benefits of curcumin and it is a waste of money on researching it to find a new drug.
- Curcumin may not make for a classical drug going strictly by the tenets of medicinal chemistry, but it certainly qualifies as an 'adjunct drug' to treat some infectious diseases.
- So, summarily dismissing curcumin research as wasteful would be like burying a lot of remarkable science around Haldi.

Litchi controversy:

- Turns out, eating Litchi and then not eating an evening meal, could be fatal. It kills a lot of children in Muzaffarpur region of Bihar, the litchi capital of India.
- Recently, a revelation was made in Lancet. Litchi fruits are laden with naturally occurring toxins like hypoglycin A and methylene cyclopropylglycine.
- Which could trigger low glucose levels and metabolic derangement among children. The toxins embedded in the fruit reverses all its inherent sugariness.
- The dispute began when a set of scientists alleged that the Lancet study did not follow a basic ethical practice in science i.e., acknowledging similar previous findings. It is called as 'scientific misconduct'.

MISCELLANEOUS

High Nitrogen Steel

- High nitrogen steels (HNS) are a new class of high alloy martensitic, austenitic or duplex grades with up to 0.9 mass% of N in solid solution. They are applied e.g. to stainless tools and bearings, in chemical engineering and for high strength non-magnetic components.
- HNS is not only tough but also has good strength. In addition to being nonmagnetic as well as corrosion resistant, the HNS cost is about 40% less compared to Rolled Homogenous Armour Steel (RHA).
- This material has potential for a number of defence and civil applications like armouring, mine trawls, oil industries etc.

Aleppo:

- Aleppo was once Syria's largest city, with a population of about 2.3 million.
- It was also the country's industrial and financial centre.
- The old city is a Unesco World Heritage site and was famous for its 13th Century citadel, 12th Century Great Mosque and huge covered markets.

3rd Mar. 2017

GS : 2 - INTERNATIONAL RELATIONS

India to attend Lahore meet on Indus Waters Treaty

(The Hindu)

- Signalling a major shift in its position on talks with Pakistan on the Indus Waters Treaty (IWT), India has accepted an invitation to attend a meeting of the Permanent Indus Commission (PIC) to be held in Lahore in March.
- The move came after two months of diplomatic negotiations, with World Bank officials playing the mediator in encouraging Pakistan to extend an invitation and for India to accept it.

Background:

- The development comes after the relations between the two nuclear-armed nations plummeted following the Pathankot terror attack that took place in January last year.
- Pakistan has firmly stated that it will not accept any alterations or changes to the IWT after India had said that it is ready to engage in further consultations with Islamabad on the matter of resolving current differences over the Kishenganga and Ralte projects under the treaty.
- Islamabad has argued that India was buying time to complete its two disputed water projects and then insisting that since the project was already complete, it could not be modified.

- Pakistan is raising its objection to building of the **Kishanganga**(330 megawatts) and **Ratle** (850 megawatts) hydroelectric plants by India saying that it violates the provisions of the treaty.

Permanent Indus Commission:

- The Permanent Indus Commission is a bilateral commission of officials from India and Pakistan, created to implement and manage goals of the Indus Waters Treaty.

Indus Water Treaty:

- The treaty was signed in 1960 by Indian Prime Minister Jawaharlal Nehru and Pakistan President Ayub Khan and gives India control over the three eastern rivers of the Indus basin, **the Beas, the Ravi and the Sutlej** while Pakistan has the three western rivers, the Indus, the Chenab and the Jhelum.
- As per the provisions in the treaty, India can use only **20 percent** of the total water carried by the Indus River.
- The Indus Waters Treaty 1960 is seen as one of the most successful international treaties and has withstood frequent tensions between India and Pakistan, including conflict.

GS : 2 - INSTITUTIONS

Pakistan returns to SAARC, gets Secretary General post

(The Hindu)

- After months of difficulty posed mainly by India, Pakistan succeeded in getting its official elected to the post of the Secretary General of the South Asian Association for Regional Cooperation (SAARC).
- This success for Pakistan was backed by all members, including India, which made the selection consensus-based.

Background:

- Earlier, India had opposed holding of the 19th SAARC summit in Islamabad in November 2016 following the terror strike in Uri.

About SAARC:

- SAARC is an organization of eight countries located in the South Asia and it stands for the South Asian Association for Regional Corporation.
- The Secretariat of this organization is located in the **Kathmandu** which is capital of Nepal.
- 3% of the area of the world is represented by SAARC countries.
- It is around 1.7 billion of the people and it is 21% of the world population.
- All six member countries share borders with the big brother of the SAARC nations India. Only exception is Afghanistan. Late President of Bangladesh Ziaur Rahman first raised the necessity of regional and political and economical cooperation in the South Asia on the 2nd May 1980.
- Subsequently on the 8th of December 1985 fist SAARC countries summit was held in Dhaka Capital of Bangladesh.
- Initial members of the SAARC countries were **India, Bangladesh, Pakistan, Bhutan, Neola, Maldives and Sri Lanka**. Later another country Afghanistan was awarded the full membership and there are several other countries were given observer memberships.
- **Objective** of the SAARC to develop economies, collective self reliance in the South Asian countries and to step up the social and cultural development in South Asian countries.

GS : SOCIETY

Revitalising a language

(The Hindu)

- Kurukh, an endangered tribal language of the Dravidian family, is set to get a new lease of life in West Bengal.
- It is spoken by the **Oraon tribal** community.

Key facts:

- The language was given official status in the State last month.
- While most of the tribal languages in the State have their origins in the **Austro-Asiatic and Tibeto-Barman families, Kurukh is an exception.**
- The only example of a tribal language having its origin from the Dravidian family is Malto, which is not spoken in West Bengal, but in the Rajmahal hills of Jharkhand.

- The Santhali, Munda and Ho languages belong to the Austro-Asiatic family, while the languages spoken by the Lepcha, Tamang and Bhutia tribes of the Darjeeling hills were of the Tibeto-Burman group.
- Jharkhand has recognised Kurukh as a language, and students can write their school final examination in its script. “The decision to allow students to write their school final examination in Kurukh was taken by the Jharkhand government in February 2016. In 2003, the State officially recognised the language and its script.
- According to the 2001 census report (the latest official data on language-speakers), the language is spoken by about 17 lakh persons.

Way forward:

- To develop and popularise an endangered language like Kurukh, we need a standard script and grammar, a standard dictionary and textbooks.

GS : 2 - INTERNATIONAL AFFAIRS

Sweden to reintroduce conscription after 6 years

(The Hindu)

- Sweden announced that it will reintroduce compulsory military service starting this summer to respond to global security challenges, including from Russia. The government wants a more stable staff supply system and to boost its military capability because the security situation has changed.
- The Scandinavian nation, which has not seen armed conflict on its territory in two centuries, ended conscription in 2010 after it was deemed an unsatisfactory way of meeting the needs of a modern army.
- Sweden’s minority government was set to introduce to the Parliament a bill to restore conscription this summer for all Swedes born after 1999. It will last for 11 months.

The Russia factor

- Sweden is not a NATO member but has signed the body’s Partnership for Peace programme launched in 1994 to develop military cooperation between NATO and non-member countries.
- On defense issues, Sweden is very close to its Finnish neighbor, which has with Russia a border of 1,340 km. The Nordic and Baltic region’s only non-aligned countries, Finland and Sweden, have stepped up their military cooperation with U.S., following concerns over Russia’s increased military activity in northern Europe.

GS : 3 - ENVIRONMENT (POLLUTION)

NGT fixes norms for camping along Ganga

(The Hindu)

- The National Green Tribunal prohibited all camping activity on beaches along the Ganga which fall within 100 meters from the middle of the river during lean season flow from Shivpuri to Rishikesh, a hub for eco-tourism and river rafting.

What court has said:

- It cannot be disputed that river rafting is one of the significant components of eco-tourism. It needs to be encouraged but with a clear mandate that it should not cause any environmental and biodiversity degradation particularly in relation to the flood plains and the forest areas adjacent to the sites identified for river rafting.
- The court directed that all beaches which fall within the 100-metre restriction shall be closed to camping or any such activity.
- Of the total 56 beaches, 33 were recommended for camping while 23 were out of bounds.
- The portion of the identified beaches which majorly fall outside the restriction of 100 meters should alone be used for effective camping.
- While the remaining part of the beach(Out of the 33 sites recommended, 22 sites are partially within 100 meters and partially outside 100 meters.), should not be permitted to be used for any effective activity except a casual use for the purpose of walking and such activity which is not dependent upon requirement of any other permanent or temporary infrastructure.

Note: The implementation is a State issue.

GS : 3 - SCIENCE AND TECHNOLOGY

DRDO Hands Over its Developed Products to Indian Army

(PIB)

- Defence Research and Development Organisation (DRDO) handed over three of its products for induction into the Indian Army.

- The products are namely
- Weapon Locating Radar (WLR), **SWATHI**,
- NBC Recce vehicle and
- NBC Drugs.

Weapon Locating Radar (WLR)-SWATHI:

- Weapon Locating Radar (WLR), SWATHI, provides fast, automatic and accurate location of all enemy weapons like mortars, shells and rockets firing within in its effective zone of coverage and simultaneously handles multiples projectiles fired from different weapons at different locations.
- The system is capable of adjusting the fire of our own artillery weapon also.
- The weapon includes 81mm or higher calibre mortars, 105mm or higher calibre shells and 120mm or higher calibre free flying rockets.
- Thus WLR has two roles to perform:
 - Weapon Location Mode for enemy Artillery
 - Direction of Own artillery Fire (DOOAF) Mode for our own Artillery.

NBC Recce Vehicle Mk-I:

- The NBC Recce Vehicle Mk-I, is developed for carrying out post event recce of **Nuclear, Biological and Chemical Contaminated areas**.
- It is capable of collecting **solid and liquid samples** of biologically contaminated areas, mark the nuclear and chemical contamination zone and transfer the recce data speedily to support formations.

NBC Drugs:

- DRDO’s INMAS is actively engaged in research in the field of radio protectors, de-corporating agents and antidotes for Chemical, Biological, Radiological and Nuclear (CBRN) emergencies, combat casualty care and other life saving drugs.
- INMAS has carried out extensive research and laboratory trials in the past two decades to develop formulations for use as antidotes and de-corporating agents for CBRN emergencies.

GS : 3 - ENVIRONMENT

“OPERATION THUNDERBIRD” and “OPERATION SAVE KURMA”

(PIB)

- In a major success in the fight against wildlife crime, Wildlife Crime Control Bureau (WCCB), Ministry of Environment, Forest and Climate Change, coordinated “OPERATION THUNDER BIRD” in India, from January 30-February 19, 2017.
- Operation Thunderbird is the code-name for INTERPOL’s multi-national and multi-species enforcement operation.
- The operation brought about a unanimous approach by the state enforcement agencies in the fight against wildlife crime in the country.
- Preceding this operation, WCCB had convened a species specific operation on turtles, code named “OPERATION SAVE KURMA” from December 15 last year to January 30, this year. The operation brought about an awareness among the enforcement agencies to focus on the existing trade routes and major trade hubs in the country, which will be specifically focused in future.

World Wildlife Day

- The World Wildlife Day is observed on **3rd March** every year to celebrate and raise awareness about the world’s wild fauna and flora. It is celebrated to mark the signing of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) on this day in 1973.

What is CITES?

- CITES is an international agreement between governments.
- Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- CITES was drafted as a result of a resolution adopted in **1963** at a meeting of members of IUCN (The World

Conservation Union). 1 July 1975 CITES entered in force.

- CITES is an international agreement to which States (countries) adhere voluntarily. States that have agreed to be bound by the Convention ('joined' CITES) are known as Parties.
- Although CITES is **legally binding** on the Parties – in other words they have to implement the Convention – it does not take the place of national laws.
- Rather it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.
- For many years CITES has been among the conservation agreements with the largest membership, with now 183 Parties.

4th Mar. 2017

GS : 2 - POLITY

SC denies permission to abort 26-week-old foetus suffering from Down's Syndrome (The Hindu +Indian Express)

Why in news?

- The Supreme Court rejected a Maharashtra woman's plea to terminate her 26-week-old foetus on the ground that it suffered from Down syndrome after a court-appointed medical board advised against the abortion.
- The 37-year-old woman from Alibaug approached the top court seeking judicial intervention because the law does not allow a woman to abort if her pregnancy crosses 20 weeks.
- The woman's counsel Colin Gonsalves said if a foetus is detected with Down's Syndrome before the 20-week ceiling doctors advise abortion. The senior advocate said no other country in the world had restrictions like the one under the Indian law.

Courts Verdict:

- Termination of pregnancy is allowed in extreme cases if continuation is likely to cause grave injury to the woman's health and/or increase or induce a risk of abnormalities in the child.
- It was also argued that it was the woman's constitutional right to terminate her pregnancy.
- The court refused permission by calling the foetus 'a life'.
- It cited that the Medical Termination of Pregnancy (MTP) Act of 1971 places a 20-week ceiling on termination of pregnancy.

MTP Act, 1971:

- Abortion in India is legal only up to twenty weeks of pregnancy under specific conditions and situations.
- One, the continuance of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury of physical or mental health, or
- Two, there is a substantial risk that if the child were born, it would suffer from such physical or mental abnormalities as to be seriously handicapped.

The Draft MPT Bill 2014:

- The draft MTP increased the legal limit for abortion from 20 weeks to 24 weeks.
- It provides for abortion beyond 24 weeks under defined conditions.
- The Bill amends Section 3 of the 1971 Act to provide that "the length of pregnancy shall not apply" in a decision to abort a foetus diagnosed with "substantial foetal abnormalities" or if it is "alleged by the pregnant woman to have been caused by rape".
- Under the 1971 Act, even pregnant rape victims cannot abort after 20 weeks, compelling them to move court.
- It allows a woman to take an independent decision in consultation with a registered health-care provider.
- It also takes into account the reality of a massive shortage of both doctors and trained midwives, and seeks to allow Ayurveda, Unani and Siddha practitioners to carry out abortions.

Necessity of MPT Bill 2014:

- Foetal abnormalities show up only by 18 weeks, so just a two-week window after that is too small for the would-

be parents to take the difficult call on whether to keep their baby.

- Even for the medical practitioner, this window is too small to exhaust all possible options before advising the patient.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

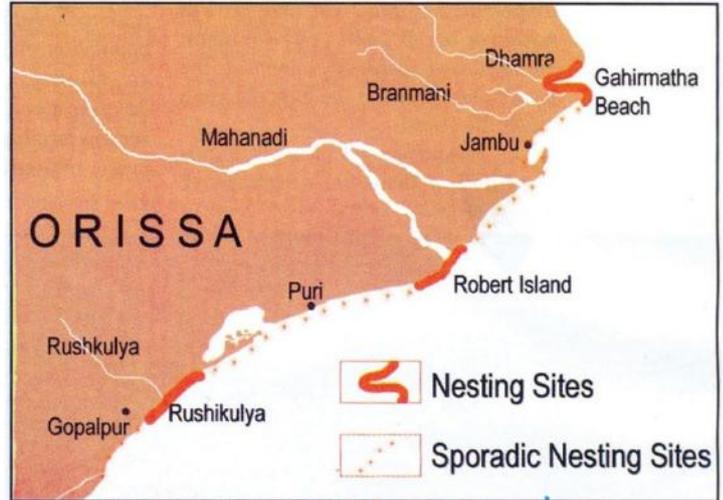
For Olive Ridleys, it's paradise lost

(The Hindu)

- Tens of thousands of eggs laid by Olive Ridley sea turtles this year in Gahirmatha Sanctuary in Odisha, one of the world's largest nesting grounds, are getting destroyed due to shrinking coastal space.
- The ongoing mass nesting of the endangered animals has enthused conservationists, but habitat decline is undoing the gains.

Key points:

- The turtles had largely given the island a miss in 2016, with only 50,000 coming to nest. Since the small island could not host all those that turned up this year, only 50% of eggs may survive.
- A female sea turtle scoops beach sand out to lay 80 to 120 eggs, but its effort is undone when a second digs at the same place to lay its own.
- In the Visakhapatnam region, the Forest Department recorded 447 nests with 47,000 eggs, the highest so far.



NESTING SITES OF OLIVE RIDLEY TURTLES

Gharimatha Marine Sanctuary:

- Gahirmatha Marine Sanctuary is a marine wildlife sanctuary located in Odisha. It extends from Dhamra River mouth in the north to Mahanadi river mouth in the south.
- It is very famous for its nesting beach for olive ridley sea turtles. It is the one of world's most important nesting beach for turtles.
- Olive Ridley sea turtle has found place in Schedule – I of Indian Wildlife (Protection) Act, 1972 (amended 1991).
- All the species of sea turtles in the coastal water of Odisha are listed as "endangered" as per IUCN Red Data Book.
- The sea turtles are protected under the 'Migratory Species Convention' and CITE (Convention of International Trade on Wildlife Flora and Fauna).
- India is a signatory nation to all these conventions. The 'Homing' characteristics of the Ridley sea turtles make them more prone to mass casualty.

GS : 1 - ART AND CULTURE

Lakkaram tank regains lost glory

(The Hindu)

- The Lakkaram tank of Kakatiya period here has received a new lease of life following near total restoration of the water body at an estimated cost of Rs 13.5 crore under the Mission Kakatiya scheme.

Mission Kakatiya:

- Mission Kakatiya is the Telangana government's flagship programme aimed at restoring minor irrigation sources like tanks and other water bodies to help small and marginal farmers.
- The name 'Mission Kakatiya' is given in the remembrance and tribute to the Kakatiya rulers who developed large number of the irrigation tanks.

Kakatiya dynasty:

- The 12th and the 13th centuries saw the emergence of the Kakatiyas. They were at first the feudatories of the Western Chalukyas of Kalyana, ruling over a small territory near Warangal. Prataparudra I established a sovereign dynasty in 1163 CE. The dynasty saw powerful leaders like Ganapathi Deva and Rudrama devi.
- Prataparudra I, also known as Kakatiya Rudradeva, was the son of the Kakatiya leader Prola II. It was under his

rule that the Kakatiyas declared sovereignty. He ruled the kingdom till 1195 A.D.

- It was under the rule of Prataparudra I that usage of Telugu language in inscriptions began.
- Before the establishment of Orugallu/Warangal as the capital, Hanamakonda was the first capital of the Kakatiyas.
- The great Italian traveller Marco Polo visited the Kakatiya Kingdom sometime during Rudramadevi's tenure as the ruler of the Kakatiya Dynasty and made note of her administrative style; admiring her extensively.
- The iconic Kakatiya Thoranam was built by Rudrama devi's father in the 12th Century. This ornate arch is said to have many similarities with the gateways at the Sanchi Stupa and is also the emblem of Telangana.
- The scenic Pakhallake in Warangal was built by Ganapathi Deva.
- The 1000 pillar temple in Warangal was built during the Kakatiya Rule and is another example to the exquisite Kakatiya Architecture.
- Under the Kakatiya rule, the caste system was not rigid and in fact, it was not given much significance socially. Anyone could take up any profession and people were not bound to an occupation by birth.
- The Koh-i-Noor Diamond, which is now among the jewels set in the British Crown, was mined and first owned by the Kakatiya Dynasty.
- Since the end of 13th Century and the early of 14th Century, Kakatiya Kingdom faced several attacks by the Delhi Sultanate. The attacks started under Alauddin Khilji's rule and it is said that it is during this time that the Koh-i-Noor went into the hands of the Delhi Sultanate.
- The Kakatiya rule finally came to an end in 1323 A.D. when Warangal was conquered by the Ghiyasuddin Tughlaq, the then Sultan of Delhi.

GS :

India to Host 10th International Conference on Theory and Practice of Electronic Governance: ICEGOV 2017 (The Hindu)

Why in news?

- The Ministry of Electronics & Information Technology, Government of India, in collaboration with United Nations University and UNESCO, is organizing a three-day International Conference 10th ICEGOV 2017 in Delhi in March.
- Theme: Building Knowledge Societies: From Digital Government to Digital Empowerment.

Key facts:

- The key objective of ICEGOV2017 is to explore how Digital Government can lead to Digital Empowerment by local knowledge.
- ICEGOV 2017 is the 10th edition of ICEGOV, which will focus on the use of technology to transform relationships between government and citizens, businesses, civil society.
- It will try to inculcate an outlook to create new forms, paradigms, foundations for technology-enabled governance, collaboration, development.

International Conference on Theory and Practice of Electronic Governance (ICEGOV)

- ICEGOV is an international conference series, established by the United Nations University in 2007, with the aim of bringing together practitioners, developers and researchers from government, academia, industry, non-governmental organizations and UN organizations to share the latest in theory and practice of Electronic Governance.
- The ICEGOV series focuses on the use of technology to transform relationships between government and citizens, businesses, civil society and other arms of government (Electronic Governance).
- The Series looks beyond the traditional focus on technology-enabled transformation in government (Electronic Government), towards establishing foundations for good governance and for sustainable national development.

MISCELLANEOUS

National Human Rights Commission (NHRC)

- NHRC is an autonomous public body constituted on 12 October 1993 under the Protection of Human Rights Ordinance of 28 September 1993.

- It was given a statutory basis by the Protection of Human Rights Act, 1993.
- The NHRC is the National Human Rights Commission of India, responsible for the protection and promotion of human rights, defined by the Act as "rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants".
- "Human Rights" means the rights relating to life, liberty, equality and dignity of the individual guaranteed by the constitution or embodied in the International covenants and enforceable by courts in India.

The Mars Atmosphere and Volatile Evolution (MAVEN)

- MAVEN, NASA's spacecraft, has been orbiting Mars for the past two years.
- MAVEN is studying Mars' upper atmosphere, ionosphere and its interactions with the sun and solar wind.
- An important aspect of the MAVEN mission is studying how early Mars lost much of its atmosphere.
- This atmospheric loss may have been partially responsible for Mars' transition from a planet capable of supporting liquid surface water to the dry, desert world we know today.
- Recently, MAVEN has avoided its head-on collision with Phobos, the natural satellite of Mars.
- The other one is Deimos. Phobos is the innermost and larger of the two.

5th Mar. 2017

GS : 2 - POLITY

Work on Shahpur Kandi Dam to Resume Soon Punjab and J&K sign agreement to this effect (PIB)

- In a major step towards utilization of India's rights on Eastern rivers of Indus basin, the mediation efforts of Ministry of Water Resources, RD&GR persuaded the States of J&K and Punjab to reach an agreement to resume works on Shahpur Kandi Dam project in Punjab/ J&K.

Key facts:

- The project is included in the **Scheme of National Projects** by Government of India. Under the scheme, MoWR, RD&GR provides central assistance @ **90%** of the balance cost of works component of irrigation and water supply.
- The design of the project shall be as already agreed by both the states while concurrently model studies will be done to ensure that the mandated share of 1150 cusecs of water is available to the State of J&K, which will be binding on both the States.
- The project will continue to be implemented by the Government of Punjab. However, there will be a tripartite team headed by Member, CWC and consisting of Chief Engineers of two States to monitor the project as and when required but at least once in three months to ensure that the construction is as per the agreement.
- The Government of Punjab would be making available to the Govt. of J&K 20% share in the total power generated at the Thein Dam at the mutually agreed rate of Rs. 3.50 per unit immediately, subject to the confirmation of the rates by the Central Electricity Regulatory Commission.
- Both the States agreed that other issues will be referred to Arbitration mechanism provided in the agreement signed between two states of 1979 without affecting the progress of work. It was unanimously agreed that the work on the Shahpur Kandi Dam Project would resume as soon both the State Governments formally approve the agreed decisions.

Background:

- The construction of Shahpur Kandi project was taken up in May 1999 but later halted in 2014 due to dispute between Punjab and J&K. The Ministry of WR, RD&GR had been making all out efforts to resolve the issues and resume construction.

Shahpur Kandi dam:

- The 55.5 high Shahpur Kandi dam, located in Gurdaspur district of Punjab, will help in providing irrigation facility to 5000 hectares of land in Punjab and 32173 hectares in J&K besides generation of 206 MW power.

Goods and Services Tax (GST) Council approves the CGST Bill and the IGST Bill

(PIB)

- The Goods and Services Tax (GST) Council has approved the draft CGST Bill and the draft IGST Bill as vetted by the Union Law Ministry. This clears the deck for the Central Government to take these two Bills to the Parliament for their passage in the ongoing Budget Session.

Key facts:

- Some of the main features of the two Bills, as finalized by the GST Council, are as follows:
 - i. A State-wise single registration for a taxpayer for filing returns, paying taxes, and to fulfill other compliance requirements. Most of the compliance requirements would be fulfilled online, thus leaving very little room for physical interface between the taxpayer and the tax official.
 - ii. A taxpayer has to file one single return state-wise to report all his supplies, whether made within or outside the State or exported out of the country and pay the applicable taxes on them. Such taxes can be Central Goods and Services Tax (CGST), State Goods and Services Tax (SGST), Union Territory Goods and Services Tax (UTGST) and Integrated Goods and Services Tax (IGST).
 - iii. A business entity with an annual turnover of up to Rs. 20 lakhs would not be required to take registration in the GST regime, unless he voluntarily chooses to do so to be a part of the input tax credit (ITC) chain. The annual turnover threshold in the Special Category States (as enumerated in Article 279A of the Constitution such as Arunachal Pradesh, Sikkim, Uttarakhand, Himachal Pradesh, Assam and the other States of the North-East) for not taking registration is Rs. 10 lakhs.
 - iv. A business entity with turnover upto Rs. 50 lakhs can avail the benefit of a composition scheme under which it has to pay a much lower rate of tax and has to fulfil very minimal compliance requirements. The Composition Scheme is available for all traders, select manufacturing sectors and for restaurants in the services sector.
 - v. In order to prevent cascading of taxes, ITC would be admissible on all goods and services used in the course or furtherance of business, except on a few items listed in the Law.
 - vi. In order to ensure that ITC can be used seamlessly for payment of taxes under the Central and the State Law, it has been provided that the ITC entitlement arising out of taxes paid under the Central Law can be cross-utilized for payment of taxes under the laws of the States or Union Territories. For example, a taxpayer can use the ITC accruing to him due to payment of IGST to discharge his tax liability of CGST / SGST / UTGST. Conversely, a taxpayer can use the ITC accruing to him on account of payment of CGST / SGST / UTGST, for payment of IGST. Such payments are to be made in a pre-defined order.
 - vii. In the Services sector, the existing mechanism of **Input Service Distributor (ISD)** under the **Service Tax law** has been retained to allow the flow of ITC in respect of input services within a legal entity.
 - viii. To **prevent lock-in of capital** of exporters, a provision has been made to **refund**, within seven days of filing the application for refund by an exporter, ninety percent of the claimed amount on a provisional basis.
 - ix. In order to ensure a single administrative interface for taxpayers, a provision has been made to authorize officers of the tax administrations of the Centre and the States to exercise the powers conferred under all Acts.
 - x. An agriculturist, to the extent of supply of produce out of cultivation of land, would **not** be liable to take registration in the GST regime.
 - xi. To provide certainty in tax matters, a provision has been made for an **Advance Ruling Authority**.
 - xii. Exhaustive provisions for Appellate mechanism have been made.
 - xiii. Detailed transitional provisions have been provided to ensure migration of existing taxpayers and seamless transfer of unutilised ITC in the GST regime.
 - xiv. An **anti-profiteering provision** has been incorporated to ensure that the reduction of tax incidence is passed on to the consumers.
 - xv. In order to mitigate any financial hardship being suffered by a taxpayer, **Commissioner** has been empowered to allow payment of taxes in instalments.

GS : 2 - POLITY

Centre to contest tribunal order on military pay

(The Hindu)

- The Defence Ministry has decided as a matter of principle to challenge in the Supreme Court the ruling of the Armed Forces Tribunal to grant non-functional upgrade (NFU) for the armed forces.
- While the government is not against the upgrade for the services, its challenge is on principle as a tribunal has no authority to take such a decision as it is “judicial overreach”.

Background:

- Last December, the Principal Bench of the tribunal in New Delhi granted the upgrade to the armed forces personnel in pay and allowances. The upgrade has been one of the core anomalies raised by the services in the Seventh Pay Commission recommendations, which are yet to be implemented for them.
- The Sixth Pay Commission had granted the upgrade to most Group ‘A’ officers but not the military. Since then, the armed forces had been demanding a one-time notional upgrade to ensure parity.
- However, the Seventh Pay Commission (SPC) gave a mixed verdict on it and the issue has since been referred to the Anomalies Committee.

Armed Force Tribunal: (Source: <http://www.aftdelhi.nic.in/>)

- The Armed Forces Tribunal Act 2007, was passed by the Parliament and led to the formation of AFT with the power provided for the adjudication or trial by Armed Forces Tribunal of disputes and complaints with respect to commission, appointments, enrolments and conditions of service in respect of persons subject to the Army Act, 1950, The Navy Act, 1957 and the Air Force Act, 1950.
- It can further provide for appeals arising out of orders, findings or sentences of courts- martial held under the said Acts and for matters connected therewith or incidental thereto.
- Besides the Principal Bench in New Delhi, AFT has Regional Benches at Chandigarh, Lucknow, Kolkatta, Guwahati, Chennai, Kochi, Mumbai and Jaipur.
- Each Bench comprises of a Judicial Member and an Administrative Member.
- The Judicial Members are **retired High Court Judges** and Administrative Members are **retired Members of the Armed Forces** who have held rank of Major General/ equivalent or above for a period of three years or more, Judge Advocate General (JAG), who have held the appointment for at least one year are also entitled to be appointed as the Administrative Member.

GS : 3 - INFRASTRUCTURE

By air or road, Tezu is now a vantage point

(The Hindu)

- Firming up India’s strategic space, the mountainous regions of Arunachal Pradesh are set to acquire all-weather connectivity.
- The new bridges across the Lohit river and the new commercial airport in **Tezu will smoothen transport** to several high-altitude districts near the India-China border.

Significance:

- The airport, the first in the State, will be equipped with night-landing facility. Apart from the airport, the two mega-bridges over the Lohit river will reduce hurdles in moving men and material to the eastern sector of the India-China border.

Longest bridge

- The bridges at the **Dhola-Sadiyaghat and at Digarughat** were built by the Navayuga Engineering Company Ltd (NECL).
- The **bridge at Sadiya**, at 9.15 km, will be the **longest bridge in India** once it is formally inaugurated.

Strategic preparedness

- The new bridges will also provide the necessary support for the strategic preparedness for the forces in the mountains, which will be critical for India where the new Mountain Strike Corps is likely to focus.
- The planned high altitude airfields in the Himalayan range would also be helped by the enhanced connectivity of Tezu.

Tezu:

- Tezu is the nearest town to Walong, where a legendary battle between Indian and Chinese soldiers took place between 16 October to 16 November 1962.

GS : 2 - SCHEMES

Haryana announces Tirtha Darshan scheme (Indian Express)

- The Haryana state government had prepared a **Tirtha Darshan scheme** under which **senior citizens above 60 years of age** and of Haryana domicile would be able to go on a pilgrimage within the country at government expense.

Key facts:

- Under the scheme, the government would bear the entire cost of the tour of senior citizens belonging to **Below Poverty Line (BPL) families**.
- In case of a couple, the expenses of the spouse belonging to BPL family would also be borne by the government. They would also be able to take along an assistant.
- In case of senior citizens of non-BPL families, the government would bear only 70 per cent of the cost.
- The senior citizens would be selected for the pilgrimage on the basis of draw of lots. Over 400 destinations can be visited under the scheme.
- The maximum number of pilgrims would be only 250 every year. **Selection of pilgrims will be made by a district committee headed by the deputy commissioner.**
- The tour packages shall include journey in sleeper class by chartered train and night accommodation on multi-sharing basis. Provision for travel insurance shall be mandatory for the pilgrims.
- The tour package will not include ticket price for sight-and-sound show and other such activities like boating.

MISCELLANEOUS

Economic Cooperation Organisation

- The Economic Cooperation Organisation or ECO is a Eurasian political and economic intergovernmental organization which was founded in 1985 in Tehran by the leaders of Iran, Pakistan and Turkey. It now also includes Kazakhstan, Kyrgyzstan, Azerbaijan, Tajikistan, Afghanistan, Uzbekistan and Turkmenistan.
- It provides a platform to discuss ways to improve development and promote trade and investment opportunities.
- The ECO is an ad hoc organisation under the United Nations Charter (Chap. VIII).
- The objective is to establish a single market for goods and services, much like the European Union.
- ECO's secretariat and cultural department are located in Iran, its economic bureau is in Turkey and its scientific bureau is situated in Pakistan.

6th Mar. 2017

GS : 3 - ENVIRONMENT

Caught between custom and conservation (The Hindu)

- The custom at Sri Venkateswara temple at Tirumala, of using a fragrance derived from the Small Indian Civet in the deity's worship, faces a challenge as the Tirumala Tirupati Devasthanams (TTD) and the A.P. Forest Department remain at loggerheads on captive breeding of the animal.

Key facts:

- The civet is caught in a decade-long row over supply of its **glandular 'punugu' secretion** that weighs less than a gram.
- The yellow substance from its perineal gland gets encrusted when dry and is ejected when the animal rubs against a hard surface.
- The **fragrance is used for 'abhishekam'** of Lord Venkateswara. The temple has a 'Punugu Ginne Seva' (offering in a vessel), where select devotees can touch the civet pooja vessel. The secretion is mixed with gingelly oil and heated to get an aromatic gel.

Background:

- The tussle started a decade ago, when the TTD was rearing two pairs of civets at its dairy farm in Tirupati. The animal is in part two, **Schedule II of the Wildlife (Protection) Act 1972**, that prohibits domestication.
- The Forest department seized the civets and registered a case against the TTD that was later quashed.
- At a meeting held in November 2006, it was decided that TTD would fund a nocturnal animal house at Sri Venkateswara Zoological Park, to be maintained by the Forest Department.
- However, the TTD insisted that the house be maintained by its own forest unit (led by a Forest Service officer) using its own fund of Rs.10 lakh a year, to provide a continuous supply.
- The department filed a charge sheet against TTD and seized the civets in 2008. After a four-year trial, a local court held TTD officials not guilty. Another criminal case was registered in 2013, which was also dismissed.

GS : 2 - GOVERNANCE AND SCIENCE AND TECHNOLOGY

Law enforcement in the digital era

(The Hindu)

- One consequence of the recent demonetisation was a push towards the digitisation of the economy — a move that will create transparency in the financial system.
- But this digital push must be accompanied by greater security of digital transactions to deal with the tsunami of cybercrimes that is bound to follow. India's enforcement mechanisms, laws and policies must be re-examined immediately to ensure that the theft of data or money is dealt with severely, swiftly and transparently.

Key facts:

- A recent ASSOCHAM-PwC study found that **cybercrime in India surged almost 300% between 2011 and 2014**.
- The **Indian Computer Emergency Response Team (CERT-In)**, the national agency tasked with maintaining cyber security, reported more than 50,000 security incidents in 2015.
- With the push towards digital transactions, this number will only grow. As smartphones become the preferred mode of transactions, hacking, phishing and malware based attacks are serious concerns. The Nokia malware report showed a 96% surge in mobile device infections in 2016.

Concerns:

- The logistical burden these incidents will place on law-enforcement the judiciary, will be enormous. Our police infrastructure, which doesn't yet have the capacity to handle existing cybercrimes, will be strained to breaking point in the coming surge.
- Dealing with cyber offences necessarily means upgrading the capabilities of law enforcement, either through new recruitment or by imparting technical training to existing personnel. But this prescription comes with its own problems, not least being the supply of qualified people.
- Given the salaries and perquisites in the public services vis-a-vis the private sector, hiring qualified people will be difficult. A differential pay structure or fast-track promotions will be problematic in the current system, which is strictly hierarchical. If existing personnel are trained rigorously, on the other hand, there is the danger that they will be poached by the private sector.

Solutions:

- The more promising option is a **Public Private Partnership (PPP)** to combat cybercrime. Such a partnership will draw upon the skills in the private sector to train the police, while providing practical experience in dealing with cybercrimes to corporate employees. Such models already exist and are fairly successful.
- One example is the National Cyber Forensic Training Alliance (NCFTA) in the U.S., a non-profit platform that tackles cybercrime through partnerships with subject matter experts in the public, private, and academic sectors. A similar set-up in India is the NASSCOM-affiliated Data Security Council of India (DSCI). The DSCI sets up cyberlabs in different cities and imparts training. This model is now ripe for scale-up across the country and can be tapped into by the jurisdictional police.
- In addition, we must reshape our current cybercrime laws to address the likely surge in offences relating to digitization. Given the borderless nature of cybercrimes, state police agencies need to be able to pursue offenders without worrying about jurisdiction. To allow for this, a pan-India cyber-enforcement force must be considered.
- Such a force can become a one-stop-shop for digital monetary fraud and will go a long way in assuaging the

concerns of cyber-fraud victims. Such a force will also be able to identify trends and stop entities that prey on the gullibility of uninformed citizens transitioning to the digital economy.

GS : 3 - SCIENCE AND TECHNOLOGY

Indian Navy's oldest serving aircraft carrier INS Viraat to be decommissioned

(Indian Express)

- India's oldest serving aircraft carrier INS Viraat will be retired from service. The carrier has served the Indian Navy over the course of nearly 3 decades.

Key facts:

- INS Viraat (R-22) was commissioned by the British Royal Navy as HMS Hermes (R-12) on November 18, 1959. It is the last of the conventional Centaur class aircraft carriers. It was one of four strike carriers in the Royal Navy at the time and its area of operation was primarily the Indian Ocean. It also had a notable role to play in the Falklands wars. It was decommissioned after serving 27 years in the Royal Navy in 1984.
- It also served the purpose of anti-submarine support ship, a commando carrier and a jump jet carrier. HMS Hermes was fitted with ski jumps for the Harrier vertical/short takeoff and landing.
- India chose to induct HMS Hermes into her fleet and submitted a request to purchase. The request was approved in 1986. The decision of the carrier's purchase was announced in the Indian parliament on 24 April, 1986.
- The ship was refitted at HMNB Devonport Dockyard, one of three operational naval bases for the Royal Navy in UK. It was then sold to India for \$465 million and it was rechristened before being inducted in the Indian Navy as INS Viraat.
- INS Viraat was inducted into the Indian Navy on 12 May, 1987 at the port town of Plymouth in UK and by then British High Commissioner to India P.C. Alexander. The operational birds on the carrier were Sea Harrier — (White Tigers-fighter aircraft), Speaking 42B (Harpoons- Anti-Submarine helicopters) & Speaking 42C (Commando Carrier helicopters) and Chetak (Angles- SAR helicopter).
- INS Viraat was initially meant to be decommissioned in 2009. However, due to delays in refurbishing of the Soviet-built aircraft carrier **INS Vikramaditya** (R-33), INS Viraat had to be refitted for service till 2016 when it completed 57 years of service life. It has already passed the service life of the oldest serving aircraft carrier in the **US Naval fleet USS Enterprise (CVN-65)** which is 50 years old.
- Viraat served as a lone carrier in the Indian Navy for several years and after its decommissioning, INS Vikramaditya will be the only serving aircraft carrier till the new carrier INS Vikrant is inducted.
- Viraat's first major operation was **Operation Jupiter** in 1989. It followed the breakdown of the Indian-Sri Lanka accord of 1986. The carrier was sent as part of India Peace Keeping Operations in Sri Lanka. Viraat's last operational deployment was in 2016 when it took part in the International Fleet Review at Vishakhapatnam. It has also taken part in international joint naval exercises like the **Malabar** exercise with the US Navy, **Varuna** with the French Navy and also **Naseem-Al-Bahr** with the Oman Navy. It was also a vital part of the yearly **TROPEX exercise**.
- Many parts of the ship are pre-world war/world war 2 era built.
- The future of the ship is yet undecided. Admiral Sunil Lamba is reportedly considering scrapping the ship if the Navy doesn't find a buyer. Other options include sinking the ship at one of the major tourist harbours in the country and turning it into a marine museum, making the ship a dive site. The Andhra Pradesh Tourism Development Corporation had reportedly received an in-principle nod from the Defence Ministry allowing it to convert Viraat into a museum and station it at the Kakinada port in the Bay of Bengal at India's eastern shore.

GS : 1 - GEOGRAPHY

World's oldest fossils found in Canada, say scientists

(The Guardian)

- Scientists say they have found the world's oldest fossils, thought to have formed between 3.77bn and 4.28bn years ago.

Key facts:

- Comprised of tiny tubes and filaments made of an iron oxide known as haematite, the microfossils are believed to be the remains of bacteria that once thrived underwater around hydrothermal vents, relying on chemical reactions involving iron for their energy.
- If correct, these fossils offer the oldest direct evidence for life on the planet. And that, the study's authors say, offers insights into the origins of life on Earth.

- With iron-oxidising bacteria present even today, the findings, if correct, also highlight the success of such organisms. They have been around for 3.8bn years at least.
- The new discovery supports the idea that life emerged and diversified rapidly on Earth, complementing research reported last year that claimed to find evidence of microbe-produced structures, known as **stromatolites**, in Greenland rocks, which formed 3.7bn years ago.
- However, like the oldest microfossils previously reported – samples from western Australia dating to about 3.46bn years ago – the new discovery is set to be the subject of hot debate.

MISCELLANEOUS

Leptospira

- Leptospirosis is a dangerous neglected tropical disease. It is also known colloquially as **“rat fever”** for its association with the urine of rodents among several host species.
- Leptospirosis is a bacterial disease that affects humans and animals. It is caused by bacteria of the genus *Leptospira*. In humans, it can cause a wide range of symptoms, some of which may be mistaken for other diseases. Some infected persons, however, may have no symptoms at all.
- Without treatment, Leptospirosis can lead to kidney damage, meningitis (inflammation of the membrane around the brain and spinal cord), liver failure, respiratory distress, and even death.

Outbreak conditions:

- *Leptospira interrogans* spreads under conditions of stagnant water, flood water, humidity, and proximity between man and beast.

7th Mar. 2017

GS : 3 - ECONOMY

NIIF in talks with two sovereign funds

(The Hindu)

- The National Investment and Infrastructure Fund (NIIF) has begun talks with two sovereign wealth funds to become the first investors to come on board, following the signing last fortnight of a government commitment to infuse Rs.20,000 crore into the fund.

Key facts:

- The NIIF plans to leverage the Centre’s financing – equivalent to \$3 billion – to invest a far higher amount in infrastructure firms and projects, in partnership with global, long-term investors eyeing infrastructure assets, and fund managers that could create dedicated infra sector funds.
- The anchor investment by the government in NIIF will be split into two buckets – a billion dollars will be earmarked for a **‘NIIF Direct’** fund that could directly invest in existing or new infrastructure firms or projects.
- Sovereign funds, pension and insurance companies would bring in a **similar amount**, while the **government’s stake would be kept at 49%** of this fund.

National Investment and Infrastructure Fund

- NIIF is a fund created by the Government of India for enhancing infrastructure financing in the country.
- This is different from the **National Investment Fund**.
- NIIF was proposed to be set up as a Trust, to **raise debt to invest in the equity** of infrastructure finance companies such as **Indian Rail Finance Corporation (IRFC) and National Housing Bank (NHB)**. The idea is that these infrastructure finance companies can then leverage this extra equity, manifold. In that sense, **NIIF is a banker of the banker of the banker**.
- NIIF is envisaged as a fund of funds with the ability to make **direct investments** as required. As a fund of fund it may invest in other **SEBI registered funds**.
- Its creation was announced in the Union Budget 2015-16. NIIF is **registered with SEBI as Category II Alternative Investment Fund (AIF)**.

Objective

- The objective of NIIF would be to maximize economic impact mainly through infrastructure development in commercially viable projects, **both greenfield and brownfield, including stalled projects**. It could also consider

other nationally important projects, for example, in manufacturing, if commercially viable.

Functions of NIIF

- The functions of NIIF are as follows:
- Fund raising through suitable instruments including off-shore credit enhanced bonds, and attracting anchor investors to participate as partners in NIIF;
- Servicing of the investors of NIIF.
- Considering and approving candidate companies/institutions/ projects (including state entities) for investments and periodic monitoring of investments.
- Investing in the corpus created by Asset Management Companies (AMCs) for investing in private equity.
- Preparing a shelf of infrastructure projects and providing advisory services.

NIIF

- provides equity / quasi-equity support to those Non Banking Financial Companies (NBFCs)/Financial Institutions (FIs) that are engaged mainly in infrastructure financing. These institutions will be able to leverage this equity support and provide debt to the projects selected.
- Invest in funds engaged mainly in infrastructure sectors and managed by Asset Management Companies (AMCs) for equity / quasi-equity funding of listed / unlisted companies.
- provides Equity/ quasi-equity support / debt to projects, to commercially viable projects, both greenfield and brownfield, including stalled projects.

GS : 3 - ENVIRONMENT

Centre launches survey on Gangetic dolphins

(The Hindu)

- The Centre has launched the first ever across-the-river survey in the Ganga to determine the population of aquatic life, including that of the endangered Gangetic dolphin.
- The survey will create a baseline scientific data for the government to take suitable measures to improve quality of the river water.

Key facts:

- The first leg of the census was launched on March 1 from Narora in Uttar Pradesh to Bijnor (covering distance of nearly 165 km) to establish the number of the national aquatic animal.
- A study to figure out fish species composition in the 2525-km-long river has been also been kick started from Harshil in Uttarakhand.
- The authority is conducting the survey through **Wildlife Institute of India (WII)**, under the **Namami Gange programme**.

Significance:

- The study will, therefore, find out stretches where dolphin is habitating, what are the conditions there and the level of threat the long-snouted species is facing in a particular belt.

Ganges River Dolphins :

- Ganges River Dolphins prefer deep waters, in and around the confluence of two or more rivers. They share their habitat with crocodiles, fresh water turtles and wetland birds.
- The distribution range of the Ganges River Dolphins in India covers seven states namely, Assam, Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Jharkhand and West Bengal. The Upper Ganga River (in Uttar Pradesh), Chambal River (Madhya Pradesh and Uttar Pradesh), Ghaghra and Gandak Rivers (Bihar and Uttar Pradesh), Ganga River, from Varanasi to Patna (Uttar Pradesh and Bihar), Sone and Kosi rivers (Bihar), Brahmaputra from Sadia (foothills of Arunachal Pradesh) upto Dhubri (on the Bangladesh Border) and Kulsi River, a tributary of the Brahmaputra river, form ideal habitats for the Ganges River Dolphin.
- The Gangetic Dolphins are generally blind and catch their prey in a unique manner. They emit an ultrasonic sound which reaches the prey. The dolphin then registers this image in its mind and subsequently catches hold of its prey.
- Listed by IUCN as '**endangered**' and placed in Schedule-I of the Wildlife (Protection) Act, 1972, the Ganges River

Dolphin enjoys high levels of legal protection both nationally and internationally.

GS : 2 - INTERNATIONAL RELATIONS

Donald Trump signs 'Muslim Ban 2.0' order

(The Hindu)

- The Donald Trump administration issued a new executive order, temporarily banning travel from six Muslim majority countries to the United States, after an earlier order ran foul of the country's judiciary. The new executive order bans travel from Sudan, Syria, Iran, Libya, Somalia, and Yemen, leaving out Iraq that was also in the list of barred countries in the January order.

Key facts:

- In an attempt to pass the next round of inevitable judicial scrutiny, current visa and green card holders from these countries will not be affected by this order. The order also explains the basis for including the six countries trying to remedy a lacuna in the earlier order. The new order also avoids the preferential treatment offered to Christian refugees in the earlier order.
- There will be a 90-day ban on the issuance of new visas for citizens of these six countries, and nation's refugee program will be suspended for 120 days, according to the order.
- While the temporary ban is in place for 90 days, the U.S. administration will review the security measures in place to prevent **potential threats** from gaining a U.S. visa.
- The number of refugees to be admitted this year has been reduced to 50,000 from the 110,000 cap set by the Obama administration. The indefinite ban on Syrian refugees has been lifted.

GS : 2 - BILATERAL RELATION AND INTERNATIONAL ORGANISATIONS

Cabinet approves MoU between India and the United Nations Entity of Gender Equality and Empowerment of Women (UN-Women)

(PIB)

- Union Cabinet has approved the signing of Memorandum of Understanding (MoU) between India and the United Nations Entity of Gender Equality and the Empowerment of Women (UN-Women).
- The proposal seeks to provide technical support to the **Ministry of Panchayati Raj** in strengthening capacities of governance institutions including Panchayati Raj Institutions (PRIs) to better leverage opportunities created for **gender equality through legislation, policies and programmes.**

Key facts:

- Ministry of Panchayati Raj (MoPR) and UN-Women have worked in collaboration with each other to promote participation of women in Panchayati Raj Institutions (PRIs), to focus on building capacities of Elected Women Representatives to empower them and enhance their effectiveness.
- Given the past gains, the two parties will now work together towards participatory design of governance processes and effective implementation of laws, policies and programmes to promote gender responsive governance.
- The parties agree that engendering the initiatives of MoPR, including capacity development efforts, will be of mutual benefit, and will further their shared mission of good governance, gender equality and women's empowerment.
- In the long run, it will enable an improvement in the status of rural women in India, as well as contribute to meeting India's commitment to the **Convention to Eliminate All Forms of Discrimination Against Women (CEDAW)**, the **Beijing Platform for Action** and the **Sustainable Development Goals.**
- The proposed MoU will facilitate the achievement of time-bound results in the implementation of specific activities identified jointly by MoPR and UN Women within the broader framework for cooperation under the **United Nations Development Assistance Framework ((UNDAF).** This MoU would thus facilitate operationalizing this important partnership.
- Activities under this MoU will be implemented at the district and sub-district level in **six States i.e. Andhra Pradesh, Telengana, Odisha, Karnataka, Rajasthan and Madhya Pradesh.**

United Nations Entity of Gender Equality and Empowerment of Women (UN-Women):

- In July 2010, the United Nations General Assembly created UN Women, the United Nations Entity for Gender Equality and the Empowerment of Women.

- In doing so, UN Member States took an historic step in accelerating the Organization’s goals on gender equality and the empowerment of women.
- The creation of UN Women came about as part of the **UN reform agenda**, bringing together resources and mandates for greater impact. It merges and builds on the important work of **four previously distinct parts of the UN system**, which focused exclusively on gender equality and women’s empowerment:
 - Division for the Advancement of Women (DAW)
 - International Research and Training Institute for the Advancement of Women (INSTRAW)
 - Office of the Special Adviser on Gender Issues and Advancement of Women (OSAGI)
 - United Nations Development Fund for Women (UNIFEM)

GS : 3 - SCIENCE AND TECHNOLOGY

Trade Mark Rules 2017

(PIB)

- The Trade Mark Rules, 2017 have been notified and have come into effect from 06th March, 2017. These Rules, which replace the erstwhile Trade Mark Rules 2002, will streamline and simplify the processing of Trade Mark applications.

Some salient features of the revamped Rules are as follows:

- Number of Trade Mark (TM) Forms have been reduced from 74 to 8.
- To promote **e-filing** of TM applications, the fee for online filing has been kept at **10% lower** than that for physical filing.
- Based on stakeholders feedback, the fees for Individuals, Start-ups and Small Enterprises have been reduced from that proposed in the draft Rules – i.e. only Rs 4,500 as against Rs 8,000 for e-filing of TM applications proposed at the draft stage.
- Modalities for determination of well-known trademarks have been laid out for the first time.
- The provisions relating to expedited processing of an application for registration of a trade mark have been extended right upto registration stage (hitherto, it was only upto examination stage).
- Over all fees have been rationalized by reducing the number of entries in Schedule I from 88 to just 23.
- Modalities for service of documents from applicants to the Registry and vice-versa through electronic means have been introduced to expedite the process; e-mail has been made an essential part of address for service to be provided by the applicant or any party to the proceedings so that the office communication may be sent through email.
- **Hearing through video conferencing** has been introduced.
- Number of adjournments in opposition proceedings has been restricted to a maximum of two by each party, which will help dispose off matters in time.
- Procedures relating to registration as Registered User of trademarks have also been simplified.
- It may be recalled that the examination time for a TM application has already been brought down from 13 months to just 1 month in January 2017; this is despite a stupendous 35% jump in TM filings in 2015-16 vis a vis the previous year. The new Rules should give a boost to the Intellectual Property Regime in India.

GS : 3 - ECONOMY

Cabinet approves India's accession to the Customs Convention on International Transport of Goods under cover of TIR Carnets (TIR Convention)

(PIB)

- The Union Cabinet has given its approval for India's accession to the **Customs Convention on International Transport of Goods** under cover of TIR Carnets (TIR Convention) and for completion of necessary procedures for ratification, for its entry into force.

Key facts:

- The Convention will help Indian traders to have access to **fast, easy, reliable and hassle free international system for movement of goods** by road or multi- modal means across the territories of other contracting parties.
- By joining the convention, the need for inspection of goods at intermediate borders as well as physical escorts en route shall be obviated due to reciprocal recognition of Customs controls. Customs clearance can take place at

internal Customs locations thereby avoiding clearances at Border Crossing Points and ports that may often be congested.

- Movement under the TIR can be allowed by checking only the seals and the external conditions of the load compartment or the container thereby reducing border delays, transport and transaction costs thereby leading to increased competitiveness and growth for the trade and transport sectors.
- Compliance with the Convention shall ensure enhanced security in the supply chain as only approved transporters and vehicles are allowed to operate in terms of the Convention.
- As the TIR Carnet represents a guarantee for Customs duties and taxes and traffic in transit, there is no need for payment of such taxes and duties en route.
- The TIR carnet also serves as a **Customs declaration**, and hence it precludes the need to file multiple declarations satisfying national laws of the different transiting countries.
- The TIR Convention can be an instrument for movement of goods along the **International "North-South" Transport (INSTC) Corridor** and would be helpful in boosting trade with the Central Asian Republics and other Commonwealth of Independent States (CIS), particularly using ports in Iran like the Chabahar port.
- The proposal does not result in any direct financial implication for the Government of India as it pertains to India's accession to an international convention.

Background:

- The Customs Convention on International Transport of Goods under cover of TIR Carnets, **1975 (TIR Convention)**, is an international transit system **under the auspices of the United Nations Economic Commission for Europe (UNECE)** to facilitate the seamless movement of goods within and amongst the Parties to the Convention.
- At present there are **70 parties** to the Convention, including the European Union.

GS :2 - POLITY

The Insolvency and Bankruptcy Board of India (IBBI) recognises two Insolvency Professional Entities (IPEs) under the Insolvency and Bankruptcy Code, 2016 (Code) (PIB)

- The Insolvency and Bankruptcy Board of India (IBBI) has recently recognised two Insolvency Professional Entities (IPEs) as under:
 - i. IRR Insolvency Professionals Private Limited
 - ii. AAA Insolvency Professionals LLP

Key facts:

- A limited liability partnership, a registered partnership firm or a company may be recognised by the IBBI as an IPE if
 - (a) majority of the partners of the limited liability partnership or registered partnership firm are registered as **insolvency professionals (IPs)**; or
 - (b) a majority of the whole-time directors of the company are registered as insolvency professionals, as the case may be. An IPE is jointly and severally liable for all acts or omissions of its partners or directors as IPs committed during such partnership or directorship.
- The Insolvency Professionals (IPs) are registered and regulated by the IBBI.
- They have a critical role in transactions under the Insolvency and Bankruptcy Code, 2016 (Code).

Insolvency and Bankruptcy Code, 2016:

- The Insolvency and Bankruptcy Code, 2016 is considered as the biggest economic reform next only to GST. It offers a market determined, time bound mechanism for orderly resolution of insolvency, wherever possible, and orderly exit, wherever required.
- The Code envisages an ecosystem comprising National Company Law Appellate Tribunal (NCLAT), National Company Law Tribunal (NCLT), Debt Recovery Appellate Tribunal (DRAT), Debt Recovery Tribunal (DRT), Insolvency and Bankruptcy Board of India (Board), Information Utilities (IUs), Insolvency Professionals (IPs), Insolvency Professional Agencies (IPAs) and Insolvency Professional Entities (IPEs) for implementation of the Code.
- With concerted efforts of all concerned, there has been considerable progress in terms of putting in place some of the key elements of the ecosystem and also operationalization of provisions relating to corporate insolvency resolution and liquidation. The debtors and creditors alike have commenced transactions under the Code.

MISCELLANEOUS

International Smart Grid Action Network (ISGAN)

(PIB)

- ISGAN is an agreement **under International Energy Agency (IEA)** and consists of representatives from 25 countries across the globe.
- India is one of the founding Member of ISGAN and Joint Secretary (Distribution), Ministry of Power, is the member representative of India.
- ISGAN creates a mechanism for multilateral **government-to-government collaboration** to advance the development and deployment of smarter electric grid technologies, practices and systems.
- The Ministry of Power, Government of India has recently hosted the 13th Executive Committee (ExCo) Meeting of the International Smart Grid Action Network (ISGAN) at POWERGRID Corporate Center, Gurugram. This is the first ever Executive Committee Meeting of ISGAN held in India.

INDIAN STRATEGIC PETROLEUM RESERVES LIMITED

- To ensure energy security, the Government of India had decided to set up 5 million metric tons (MMT) of strategic crude oil storages at three locations namely, **Visakhapatnam, Mangalore and Padur (near Udupi)**.
- These strategic storages would be in addition to the existing storages of crude oil and petroleum products with the oil companies and would serve as a cushion during any external supply disruptions.
- The construction of the Strategic Crude Oil Storage facilities is being managed by **Indian Strategic Petroleum Reserves Limited (ISPRL), a Special Purpose Vehicle**, which is a wholly owned subsidiary of **Oil Industry Development Board (OIDB)** under the **Ministry of Petroleum & Natural Gas**.
- Engineers India Limited (EIL) is taken as the Project Management Consultant for all three projects.

8th Mar. 2017

GS : 2 - POLITY

CAG to undertake audit of demonetisation fallout

(The Hindu)

- The Comptroller and Auditor General of India will soon begin an audit of various aspects of demonetisation announced on November 8 last year.

Does it fall within CAG's audit jurisdiction?

- Demonetisation per se is a banking and money supply issue and as such, outside the CAG's audit jurisdiction. But the CAG is well within its rights to seek audit of fiscal impact of demonetisation, largely its impact on tax revenues. That way the issue gets linked with the public exchequer.
- There are other linkages of demonetisation with the public exchequer that will also be covered by the audit. For instance, expenditure on printing of notes, RBI dividend to the Consolidated Fund, etc.
- The huge amount of data generated by banks and the Income-Tax Department in the wake of demonetisation would also be covered.
- This banking transaction data and the follow-up by the Revenue Department can also be subjected to CAG audit. Audit can look into various risks, such as errors and omissions in identifying the potential tax evaders, failures to pursue the identified suspects, selective and arbitrary pursuance of leads and consequences thereof.

GS : 2 - IMPORTANT INTERNATIONAL ORGANIZATIONS

Commonwealth unveils initiative to stamp out domestic violence

(The Hindu)

- The Commonwealth is launching an initiative to help member states tackle domestic violence, which it said remained a "stubborn stain" on communities, disproportionately impacting women.

Key facts:

- The **"Peace in the home"** programme will include toolkits to help governments across the Commonwealth involve multiple agencies — such as schools, doctors and hospitals, as well as government — and law enforcement agencies to work together effectively, and will help countries highlight and share details of initiatives that had been particularly successful at dealing with domestic violence.
- There will also be a mentoring programme for women, and an initiative to address the issue of violence around

elections and politics.

- The programme, which is being launched on Women's Day, will continue through till 2018, when there is expected to be an accord on ending domestic violence in the Commonwealth.
- The Commonwealth initiative will build a coalition of governments, businesses, human rights institutions, civil society and individual citizens to choral our efforts to address domestic violence.
- The secretariat would also launch an initiative to map the economic cost of domestic violence in Commonwealth countries, as well as focus on strengthening laws protecting women and girls across the group.

Fact check:

- Around 38% of women murdered globally were killed by an intimate partner.
- The UN estimates one in three women has suffered from violence in one form or another.

GS : 2 - GOVERNANCE

India first in bribery rate, says global NGO

(The Hindu)

- India had the highest bribery rate among the 16 Asia-Pacific countries surveyed by Transparency International between July 2015 and January 2017, with nearly seven in 10 people who had accessed public services in the country during the period paying a bribe.

Key facts:

- As much as 69% of the study group in India said they had paid a bribe, given a gift or done a favour to receive services.
- Vietnam follows with 65%, Thailand 41% and Pakistan 40%. China reported a much lower 26%.
- **Japan had the lowest incidence of bribery at 0.2 per cent.**
- South Korea and Australia recorded 3% each, Hong Kong 2% and Taiwan 6%. While 46% to 60% of Indians said they paid bribes for various public services, including in public schools and hospitals and for getting IDs, voter cards and permits and accessing utilities and the police, 31% to 45% said they paid bribes for court services as well.

Other findings of the Survey:

- The survey was conducted among more than 21,000 people in the region.
- More than 900 million people in the 16 Asia-Pacific places surveyed have paid a bribe in the last year, or more than one in four people, when accessing basic services like medicine, education or water.
- The results from across the region show that it is a key law and order institution — the police — that was thought to suffer most from corruption.
- While nearly two in five said the police were mostly or entirely corrupt (39%), many people in the region also perceived political decision-makers at both the national and local level to be highly corrupt.
- Over a third said that their legislative representatives, officials and local councilors were highly corrupt (from 35 to 37 per cent).
- Religious leaders were seen as far cleaner, with fewer than one in five saying they were highly corrupt (18 per cent).

GS : 2 - GOVERNMENT POLICY

High level delegation to USA to promote India's new Hydrocarbon Exploration and Licensing Policy (HELP) at CERA Week 2017

(PIB)

- A high level delegation led by Minister of State (I/C) for Petroleum and Natural Gas had organized a promotion event for India's new Hydrocarbon Exploration and Licensing Policy (HELP) at CERA Week 2017 in **Houston, World's energy capital** on 6th March 2017.
- The aim was to encourage active global participation in upcoming investment opportunities in India which has one of the world's fast growing oil and gas industry.

Key facts:

- India's goal is of reducing import dependency on oil and gas by 10% by 2022.
- At present, India is the third largest oil consumer in the world thus, placing an enormous focus on its energy

security.

- The most important reform is the **Hydrocarbon Exploration & Licensing Policy (HELP)** that opens up India's **entire sedimentary basin** for investment from domestic and foreign players under a simplified, transparent and investor-friendly fiscal and administrative regime.
- The new policy aims to provide Investors a ready **access to huge amount of seismic data** available in **National Data Repository (NDR)**, flexibility to carve out exploration acreages through an open acreage licensing process and increased operational autonomy through a new revenue sharing model.
- The National Data Repository (NDR) manifested through an open acreage licensing (OAL) process will be a key facilitator by providing seamless access to India's entire E&P data process through a digital medium to all investors with the objective of harnessing the potential of India's large basinal area.

The key features of HELP are:

- Single, uniform license for extraction and exploration for all types of hydrocarbon prospects
- Open acreage licensing (OAL) which will permit investors to carve out interested blocks and submit Expression of Interest (EoI), which will be subsequently given through bi-annual bid rounds
- Simple and easy to administer Revenue Sharing Model
- Full marketing freedom and free pricing for crude oil and natural gas
- Exploration allowed during entire contract period
- Zero royalty rates for deep water & ultra-deep water blocks for first 7 years
- Equal weightage to work program and fiscal share
- No oil cess
- Custom duty exemption

GS : 2 - ENVIRONMENT (POLLUTION)

Workshop on Arsenic problem in ground water and its remediation in Ganga Basin held

(PIB)

- Union Minister of Water Resources, River Development and Ganga Rejuvenation has underlined the need to make people aware about the negative impact of Arsenic in Ganga basin area.
- Under the National Aquifer mapping programme (NAQUIM) of CGWB special attention has been given to this aspect and water wells have been constructed tapping arsenic free aquifers using state of the art technology in parts of Ballia and Ghazipur districts of Uttar Pradesh

Key facts:

- Arsenic in ground water is a geogenic contaminant i.e. caused by natural geologic processes.
- Arsenic-containing groundwater in Ganga River basin is hosted by the sediments deposited by the rivers during the late Quaternary or Holocene age (<12 thousand years).
- Incidence of high arsenic in groundwater reported from various parts of the country, particularly in the Ganga-plains is a serious threat to the health of human being.
- Over the last three decades numerous measures have been initiated which includes alternate arrangement for supply of arsenic free water to the affected populace and providing arsenic removal plants.
- Arsenic occurrences in ground water in these areas is highly sporadic in nature and all the sources in these areas are not necessarily contaminated.

Solutions:

- Technological options to combat arsenic menace, in groundwater, to ensure supply of arsenic free water, in the affected areas can be **in-situ remediation** of arsenic from **aquifer system**, **ex-situ remediation of arsenic from tapped groundwater by arsenic removal technologies**, use of surface water source as an alternative to the contaminated groundwater source, tapping alternate safe aquifers for supply of arsenic free groundwater or combination of above techniques.
- Out of the above options, arsenic removal technologies and ex-situ treatment technique are being practiced widely to provide potable water to the people in the arsenic affected areas after treatment of contaminated groundwater. Their large scale use in West Bengal, based on different operating principles, with various degrees

of success and failure, has been reported.

MISCELLANEOUS

Nari Shakti Puraskars 2016

(PIB)

- The Nari Shakti Puraskar, instituted in 1999 is a way for us to recognize women who have exceeded expectations to challenge the status quo and make a lasting contribution to women's empowerment.
- The Government of India confers these awards on individuals and institutions in recognition of their service to the cause of women.
- The outstanding contributions in the field of women development & upliftment by way of being role models are of primary consideration in identifying the recipients of Puraskar.

Surya Kiran

- The eleventh edition of joint military exercise 'Surya Kiran 2017' between India and Nepal began in Pithoragarh area of Uttarakhand.
- The Surya Kiran series of military exercises are being conducted bi-annually, alternatively in India and Nepal.
- It is largest exercise in terms of troop's participation in series of military training exercises undertaken by India with various countries.
- It aims at promoting military relations while increasing interoperability in conducting joint counter insurgency operations in mountainous terrain.
- The 10 edition of the exercise was held at Army Battle School, Saljhandi in Nepal in November 2016.

MISCELLANEOUS

General Financial Rules

- The Finance Minister Shri Arun Jaitley recently released the Revised General Financial Rules (GFRs) – 2017.
- The GFRs are rules and orders dealing with matters involving public finances. General Financial Rules were issued for the first time in 1947 bringing together in one place all existing orders and instructions pertaining to financial matters. These have subsequently been modified and issued as GFRs 1963 and GFRs 2005.

AI-Nagah-II

- The second edition of joint military exercise AI-Nagah-II 2017 between **India and Oman** began in the Dhauladhar Ranges in Bakloh belt of Himachal Pradesh to strengthen the military ties between the two countries.
- The joint exercise aims to acquaint both forces with each other's operating procedures in the backdrop of counter insurgency, counter terrorism environment.
- The previous edition of the Exercise was held at Muscat, Oman in 2015.

FOIN

- The Festival of Innovation (FOIN) is a unique initiative of the Office of the President of India to recognise, respect and reward grassroots innovations and foster a supportive ecosystem.
- Hosted in the month of March at The President's House, the FOIN has become a national celebration of creativity and innovation at and for grassroots

PAU develops country's first Bt cotton varieties

- Punjab Agricultural University in Ludhiana has said that it has developed country's first genetically-modified (Bt) varieties of cotton — the seeds of which could be reused by farmers, resulting in saving the repeated cost they have to bear every season.
- Indian Council of Agricultural Research (ICAR) has identified three Bt cotton varieties — namely PAU Bt 1, F1861 and RS 2013 — for cultivation in states of Punjab, Haryana and Rajasthan.
- PAU Bt 1 and F 1861 were developed by PAU, whereas, RS 2013 was developed at Rajasthan Agricultural University (RAU), Bikaner.
- While the PAU Bt 1 was completely developed at Punjab Agricultural University, the F 1861 and RS 2013 varieties were converted to Bt version by Central Institute for Cotton Research (CICR), Nagpur.
 - All the three varieties carry "**cry1Ac**" gene imparting resistance against **bollworm complex**.

Jal Kranti Abhiyan

- Union Minister for Water Resources, River Development and Ganga Rejuvenation launched Jal Kranti Abhiyan on June 05, 2015 to consolidate water conservation and management in the country through a holistic and integrated approach involving all stakeholders making it a mass movement.
- One of the main objectives of the Jal Kranti Abhiyan is “strengthening grass root involvement of all stakeholders including Panchayati Raj institutions and local bodies for Participatory Irrigation Management.”
- There are **four** important components of Jal Kranti Abhiyan viz.
 - **Jal Gram Yojana,**
 - **Development of Model Command Area,**
 - **Pollution Abatement and**
 - **Mass Awareness Programme.**
- Under Jal Gram Yojana two water stressed villages in each district of the country are to be selected and a comprehensive water security plan is formulated to achieve water security for these villages.
- So far 726 such villages have been identified against the total target of 828. Integrated Water Security Plan for 180 Villages have been prepared and 61 of them have been approved.

9th Mar. 2017

GS : 3 - ENVIRONMENT (BIODIVERSITY)

2 more tiger reserves soon in Uttarakhand

(The Hindu)

- The Uttarakhand State is soon to get two new tiger reserves.
- The two proposed tiger reserves are The Nandhaur Wildlife Sanctuary, which falls under the Terai Arc Landscape spanning across India and Nepal, and the Surai Range in the Terai East division of the Uttarakhand forest department.
- They are currently undertaking a public consultation exercise to apprise people residing in the two areas [of the Nandhaur Wildlife Sanctuary and the Surai range] about the plan to get the areas notified as tiger reserves.



Key points:

- Uttarakhand now has two tiger reserves – the Corbett Tiger Reserve and the Rajaji Tiger Reserve.
- According to the tiger census data released in 2015, Uttarakhand has 340 tigers making it a State with the second highest tiger population in the country after Karnataka.

GS : 2 - GOVERNANCE (AADHAAR)

Aadhaar must for BPL women for free LPG

(The Hindu)

Why in news?

- The government has made having an Aadhaar card must for poor women to avail of free cooking gas (LPG) connection under the Pradhan Mantri Ujjwala Yojana.
- While the government in October 2016 made the unique identification number mandatory for everyone to get LPG subsidies, it has now extended the same for free cooking gas connections to women of BPL households.

Pradhan Mantri Ujjwala Yojana:

- Under PMUY, each of the beneficiaries will receive monetary support of about 1,600 rupees to get a connection of cooking gas. It includes administrative cost, pressure regulator booklet and safety hose.
- The scheme seeks to empower women and protect their health by shifting them from traditional cooking based on unclean cooking fuels or on fossil fuels to clean cooking gas.

- It is being implemented by Union Ministry of Petroleum and Natural Gas. It is for the first time this ministry is implementing a welfare scheme.
- The identification of eligible BPL families will be made in consultation with the State Governments and the Union Territories.
- It will be implemented over three years' time frame namely in the FY 2016-17, 2017-18 and 2018-19.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

Fewer migratory water birds sighted at Ropar

(The Hindu)

What in news?

- Fewer winter migratory water birds from central and north Asia were sighted at the Ropar Wetland in Punjab this season, apparently because of increasing human interference.
- Asian Waterbird Census 2017, conducted by Wetlands International, South Asia, and Punjab's Wildlife Preservation Department on January 16 this year, revealed that the number of water birds this season stood at 2,302 as against 3,114 last year.

Key points:

- The birds that came up this year included oriental darter and river papwing, both put on the red-list by the International Union for Conservation of Nature (IUCN).
- Asian Waterbird Census is part of the International Waterbird Census of Wetlands International, South Asia, which conducts the exercise every January across Asia and Australia.

Roper Wetland:

- Ropar (Punjab) has been declared a wetland by the Ramsar Convention of Wetlands.
- "Ropar is a riverine wetland with hardly any vegetation; but there are farmlands along the riverbanks where geese and ducks go for feeding.
- With seasonal wetlands getting dry because of global warming, migratory birds going to a particular wetland switch to nearby wetlands, lakes, reservoirs with a large open area for seasonal congregation. Hence, the number of certain species increased.

GS : 1 - ART AND CULTURE

PM Modi releases postage stamp on 100 years of Yogoda Satsang Math

(PIB, Indian Express)

- A commemorative postage stamp was recently released by the PM on 100 years of Yogoda Satsang Math.
- This year marks the 100th anniversary of Yogoda Satsanga Society of India (YSS), founded in 1917 by Paramahansa Yogananda.
- Whose Autobiography of a Yogi has introduced millions of truth seekers all over the world to yoga and meditation, and whose universal Kriya Yoga teachings provide methods for achieving spiritually harmonious lives.

Kriya Yoga:

- The "science" of Kriya Yoga is the foundation of Yogananda's teachings.
- Kriya Yoga is "union (yoga) with the Infinite through a certain action or rite (kriya). The Kriya Yogi mentally directs his life energy to revolve, upward and downward, around the six spinal centers (medullary, cervical, dorsal, lumbar, sacral, and coccygeal plexuses) which correspond to the twelve astral signs of the zodiac, the symbolic Cosmic Man.
- One-half minute of revolution of energy around the sensitive spinal cord of man effects subtle progress in his evolution; that half-minute of Kriya equals one year of natural spiritual unfoldment.

Yogoda Satsanga Society of India (YSS):

- Yogoda Satsanga Society of India (YSS) is a non-profit religious organization.
- In countries outside the Indian subcontinent it is known as the Self-Realization Fellowship.
- Founded in 1917 by Paramahansa Yogananda.

GS

Electoral bonds to flag elections: FM

(The Hindu)

- The concept of electoral bonds was introduced by Mr. Jaitley during his Budget 2017 speech in order to bring

some transparency to the electoral funding process.

Key points:

- These bonds have to be authorised under a scheme under the Income Tax Act.
- It will open for a limited period of time during the elections, or maybe a little before the elections.
- Mr. Jaitley in his Budget speech had also announced that the cap on cash donations to political parties would be reduced to Rs. 2,000 from the earlier Rs. 20,000.

Electoral bonds:

- Electoral bonds will be issued by a notified bank for specified denominations.
- If you are keen to donate to a political party, you can buy these bonds by making payments digitally or through cheque. You are then free to gift the bond to a registered political party.
- The bonds will likely be bearer bonds and the identity of the donor will not be known to the receiver.
- The party can convert these bonds back into money via their bank accounts.
- The bank account used must be the one notified to the Election Commission and the bonds may have to be redeemed within a prescribed time period.
- The electoral bond is more like a **bail-bond** than a Government or corporate bond.
- Electoral bonds are essentially like bearer cheques. The issuing bank will remain the custodian of the donor's funds until the political party redeems the bond.
- So, only the RBI will most likely be allowed to issue these bonds, to be sold through notified banks.

Significance:

- If you want to play an anonymous benefactor to a political party, electoral bonds are a neat vehicle. But do note that income tax breaks may not be available for donations through electoral bonds. So if you are keen to support a political party, chances are you will have to choose between remaining anonymous and saving on taxes.
- Also, in the electoral bond route, while the party may not know the identity of the donor, the bank will. But there do not seem to be many precedents to such a bond in other countries, even where political funding is well evolved.

GS : 3 - SCIENCE AND TECH (DEFENCE)

INS Tillanchang commissioned by Indian Navy

(The Hindu)

- India Navy has commissioned INS Tillanchang at Karwar, Karnataka.
- It is a Water Jet Fast Attack Craft (WJFAC) It is the third ship of four follow-on WJFAC built by the Kolkata based Garden Reach Shipbuilders and Engineers (GRSE).
- The first two ships INS Tarmugli and INS Tihayu which were commissioned in 2016.

Key points:

- INS Tillanchang has been indigenously designed and built and is an upgrade from the Chetlat class of Fast Attack Craft (FCA).
- It is about 50 m long and powered by three water jet propulsion system, which give it speeds of over 35 knots.
- It will be used for missions like Coastal and Off-shore Surveillance, Law Enforcement, EEZ Control as well as non-military missions such as Search and Rescue, Humanitarian Assistance and Disaster Relief (HADR).
- INS Tillanchang will be based at Karwar under the operational control of the Flag Officer Commanding, Karnataka Naval Area. It is manned by 50 personnel.

MISCELLANEOUS

G4 Nations

- The G4 nations comprising Brazil, Germany, India, and Japan are four countries which support each other's bids for permanent seats on the United Nations Security Council.
- Unlike the G7, where the common denominator is the economy and long-term political motives, the G4's primary aim is the permanent member seats on the Security Council.
- However, the G4's bids are often opposed by Uniting for Consensus movement, and particularly their economic

competitors or political rivals.

Uniting for Consensus movement

- Uniting for Consensus (UfC) is a movement, nicknamed the **Coffee Club**, which developed in the 1990s in opposition to the possible expansion of permanent seats in the United Nations Security Council.
- Under the leadership of Italy, it aims to counter the bids for permanent seats proposed by G4 nations (Brazil, Germany, India, and Japan) and is calling for a consensus before any decision is reached on the form and size of the Security Council.

Border Haats

- The border haats aim at promoting the wellbeing of the people dwelling in remote areas across the borders of two countries, by establishing traditional system of marketing the local produce through local markets.
- Currently, four border haats are operational, along the India-Bangladesh border.
- Two border haats are located in Meghalaya and two are located in Tripura.
- The trade at border haats is permitted to be carried out in Indian Rupees/Bangladesh Taka and on barter basis.
- Governments of India and Bangladesh have approved six more border haats.
- Government of India has also executed a Memorandum of Understanding (MoU) with Government of the Republic of Union of Myanmar on establishment of border haats along their border.

Global Fund for AIDS, Tuberculosis and Malaria (GFATM)

- The Global Fund is a 21st-century partnership organization designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics.
- Founded in 2002, the Global Fund is a partnership between governments, civil society, the private sector and people affected by the diseases.
- The Global Fund raises and invests nearly US\$4 billion a year to support programs run by local experts in countries and communities most in need.
- The idea was discussed at a G8 summit in Okinawa, Japan, in 2000.
- The Global Fund is a financing institution, providing support to countries in the response to the three diseases.

10th Mar. 2016

GS : 3 - SCIENCE AND TECHNOLOGY (BIOTECHNOLOGY)

Punjab varsity develops new Bt cotton varieties

(The Hindu)

- Punjab Agricultural University in Ludhiana has developed the country's first genetically-modified varieties of cotton, the seeds of which could be reused by farmers with no commercial restrictions, resulting in savings on repeat purchases every season.
- The Indian Council of Agricultural Research (ICAR) has identified three Bt cotton varieties – PAU Bt 1, F1861 and RS2013 – for cultivation in Punjab, Haryana and Rajasthan.
- Cotton is the only GM crop allowed to be cultivated in India.

Key points:

- The genetic modification of cotton involves introduction of the Bt bacterial gene that codes for a protein which kills the bollworm cotton pest.
- All three varieties carry the Cry1Ac gene obtained from Bt (*Bacillus thuringiensis*) bacteria.
- It imparts resistance against bollworm cotton pest.
- The PAU Bt 1 variety was completely developed at PAU, whereas the F1861 and RS2013 were converted to Bt version by Central Institute for Cotton Research (CICR), Nagpur.

GS : 2 - GOVERNMENT POLICIES AND INTERVENTIONS

Paid maternity leave extended to 26 weeks

(The Hindu, PIB)

Why in news?

- The Lok Sabha has passed the Maternity Benefit (Amendment) Bill, 2016 which had already been passed by the Rajya Sabha during the Winter Session.
- Calling it a ‘humble gift’ to women in India, Labour Minister Bandaru Dattatreya welcomed the Parliament nod to the Maternity Benefit (Amendment) Bill, 2016.

Key points:

- Women working in the organized sector will now be entitled to paid maternity leave of 26 weeks, up from 12 weeks.
- The new law will apply to all establishments employing 10 or more people, and the entitlement applies only up to the first two children. For the third child, the maternity leave entitlement will only be for 12 weeks.
- These measures that takes India to the third position in terms of the number of weeks for maternity leave, after Canada and Norway, where it is 50 weeks and 44 weeks, respectively.
- The Bill seeks to amend the Maternity Benefit Act, 1961.

The Maternity Benefit (Amendment) Bill, 2016:

- Maternity leave available to the working women to be increased from 12 weeks to 26 weeks for the first two children.
- Maternity leave for children beyond the first two will continue to be 12 weeks.
- Maternity leave of 12 weeks to be available to mothers adopting a child below the age of three months as well as to the “commissioning mothers”. The commissioning mother has been defined as biological mother who uses her egg to create an embryo planted in any other woman.
- Every establishment with more than 50 employees to provide for crèche facilities for working mothers and such mothers will be permitted to make four visits during working hours to look after and feed the child in the crèche.
- The employer may permit a woman to work from home if it is possible to do so.
- Every establishment will be required to make these benefits available to the women from the time of her appointment.

GS : 3 - ENVIRONMENT PROGRAMMES

Ministry of Railways and United Nations Environment Programme (UNEP) signed Letters of Intent(LOI) on Environment Initiatives

(PIB)

Why in news?

- Minister of Railways signed a LETTER OF INTENT (LOI) with United Nations Environment Programme (UNEP) to formalise the joint cooperation in the area of environmental conservation.

The focused areas identified for joint activities would be to;

1. Collaborate in Formulating Specific Roadmap for achieving 20% reduction in Water consumption at Railway establishments.
 2. Collaborate in the development of a Draft action plan for establishing waste management centres at major stations on Indian Railways.
 3. Collaborate in the development of a Draft action plan for Indian Railways on sustainable public procurement for green technology.
- The focus of this partnership is on three main areas: waste management which is important for community, reduction in water consumption which is core of environment issues and sustainable public procurement. Indian Railways is a major procurement agency.
 - The focus should be to move towards a greener state.

Background:

- Indian Railways, the lifeline of the country, with carrying 23 million passengers every day is the largest passenger

carrying system in the world.

- It is also the largest consumer of water as well as electricity and major contributor to green environment due to reduced GHG emissions.
- Indian Railways have been taking a number of steps towards Water Management, Energy Conservation, Solid Waste Management and Green buildings.
- United Nations Environment Programme (UNEP), is the leading organization within the United Nations system in the field of environment and has as a major area of focus of its global mandate, the conservation, protection, enhancement and support of nature and natural resources worldwide.

GS : 1 - GEOGRAPHY

NIO finds a new canyon system close to Kovvada coast

(The Hindu)

- Scientists of CSIR-National Institute of Oceanography (NIO) in Visakhapatnam have found three new canyons forming a major canyon system in the depths of Bay of Bengal close to Kovvada in Srikakulam district.



Key points:

- This discovery was made by clearly mapping the ocean floor between Visakhapatnam and Srikakulam by sending over 32 high density beams to the depths of the sea.
- Canyon systems are generally formed by the flow of river water into the sea and they could be as old as the river system, which is close to 23 million years.
- The new canyon system was probably formed by river Kandivalasa. It is very huge and its depth varies from about 90 metres at the starting point to about 2,500 metres at the deepest point. It extends to about 50 to 70 km deep into the sea.
- Most of the canyons in the ocean system across the world act as channels for depositing sediments from the river in the shelf region. There are more chances of finding hydro-carbons if the deposits are more.
- The discovery of the canyon is not only a major breakthrough in underwater geological formations, but also gives us immense scope to study and explore new benthic ecosystem.
- The study of how organisms live and flourish at low oxygen level and high current system can lead us to understand human heart diseases better and help us develop new treatment system.

MISCELLANEOUS

India and Belgium

- India and Belgium have signed a Protocol amending the existing Agreement and Protocol between the two countries for Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income.
- The Protocol will broaden the scope of the existing framework of exchange of tax related information.
- This in turn will help curb tax evasion and tax avoidance between the two countries and will also enable mutual assistance in collection of taxes.

Swachh Bharat Kosh (SBK)

- The SBK was set up to attract CSR funds from corporate sector and contribution from individual philanthropists to achieve the objective of Clean India (Swachh Bharat) through “Swachh Bharat Abhiyan” by the year 2019, the 150th year of birth anniversary of Mahatma Gandhi.
- The SBK is to be used to achieve the objective of improving cleanliness levels in rural and urban areas, including in schools.
- The allocation from the SBK is being used to supplement departmental resources for such activities.
- All donations towards Swachh Bharat Kosh are eligible for deduction of 100% from the total Income Tax. The contributions to SBK can also be included by companies towards CSR under the Companies Act, 2013.

China's first overseas military base

- China is constructing its first overseas military base in Djibouti and it is located just a few miles from Camp Lemonnier, one of Washington's largest installations.
- Camp Lemonnier was established after the terrorist attacks of Sept. 11, 2001, are the only permanent U.S. military installation in Africa.

11th Mar. 2017

GS : 2 - SOCIAL (HEALTH)

TN model drastically reduces response time in heart attack care

(The Hindu)

- A unique model of heart attack care has brought down the time taken respond to cardiac episodes from 900 minutes to 170 minutes in Tamil Nadu.
- The yearlong study has been funded by the Indian Council of Medical Research (ICMR).
- The landmark study reduces the symptom-to-door time by effective, early and rapid reperfusion — restoring blood flow through blocked arteries, typical after a heart attack.

Traditional method:

- Traditionally, a heart attack is treated by two strategies of re-perfusion.
- If a patient arrives at a hospital equipped with a catheterisation laboratory or 'cath lab', a procedure known as Primary PCI (Percutaneous Coronary Intervention) is performed — an urgent balloon angioplasty.
- The patient is then 'Thrombolysis' — treated to dissolve clots in blood vessels, improve blood flow, and prevent damage to tissues and organs before being discharged.

New model:

- In the new model, STEMI India, a not-for-profit organisation, use the pharmaco invasive strategy, which can be administered in any small hospital or even in the ambulance.
- The Classic STEMI India model has a hub hospital, where a cath lab is available and primary PCI is done for patients directly presented at these hospitals.
- These are linked to peripheral spoke hospitals, where thrombolysis is done following which the patient is shifted within three to 24 hours to the hub hospital for invasive treatment.
- The pre-implementation data collection was for an average period of 15 weeks and the post implementation period of 32 weeks.

Way ahead:

- Any heart attack treatment programme should consider the huge manpower and infrastructure deficiencies that exist in India.
- Blindly following the American or European system would not be feasible in this country.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

Mass coral bleaching occurring in Great Barrier Reef for second year

(The Hindu)

- Australia's Great Barrier Reef is experiencing an unprecedented second straight year of mass coral bleaching.
- The 2,300-km reef suffered its most severe bleaching on record last year due to warming sea temperatures during March and April.
- The 2016 bleaching was more severe in the northern areas of the bio-diverse site. The back-to-back occurrence of widespread bleaching also meant there was insufficient time for corals to fully recover.
- Bleaching occurs when abnormal environmental conditions, such as warmer sea temperatures, cause corals to expel tiny photosynthetic algae, draining them of their colour.

The Great Barrier Reef:

- It is the biggest coral reef system in the world composed of over 2,900 individual reefs.
- It was recorded as a World Heritage site in 1981.
- The reef is located in the Coral Sea, north east of Australia and covers an area of approximately 348,000 sq km.

- It is credited as the world's biggest single structure made by living organisms and is visible from the outer space.

Coral Bleaching:

- Bleaching occurs when abnormal environmental conditions, such as warmer sea temperatures, cause corals to expel tiny photosynthetic algae, draining them of their colour.
- Corals can recover if the water temperature drops and the algae are able to recolonise them.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

Four States come together for elephant census

(The Hindu)

- For the first attempt in India, the States of Odisha, West Bengal, Chhattisgarh and Jharkhand have decided to conduct a synchronised elephant census between May 9 and 12.

Key points:

- The four States together have the maximum number of human-elephant conflict prone regions in India.
- The States will conduct the census based on an identical set of rules — using the direct and indirect counting methods.
- The direct counting method is based on sighting of elephants while the indirect method uses the 'dung decay' formula, in which the analysis of elephant dung is used to estimate the population.
- The second method has already been used by Karnataka and Tamil Nadu.
- As per the 2015 census, Odisha has 1,954 elephants while Jharkhand, Chhattisgarh and West Bengal had approximately 700, 275 and 130 elephants, respectively.

GS : 3 - SCIENCE AND TECH (SPACE)

NASA to explore Jupiter's icy moon

(The Hindu)

- NASA's 'Europa Clipper' set to launch in the 2020s will probe the habitability of Jupiter's icy moon **Europa**.
- The mission plan includes 40 to 45 flybys, during which the spacecraft would image the moon's icy surface at high resolution and investigate its composition and the structure of its interior and icy shell.

Key Points:

- Europa has long been a high priority for exploration because it holds a salty liquid water ocean beneath its icy crust.
- The ultimate aim of Europa Clipper is to determine if Europa is habitable, possessing all three of the ingredients necessary for life: liquid water, chemical ingredients, and energy sources sufficient to enable biology.

GS : 2 - POLITY (BILLS AND ACTS)

Enemy Property Bill passed amid walkout

(The Hindu)

- The Rajya Sabha passed the Enemy Property (Amendment and Validation) Bill, 2016, in the sixth attempt after ordinances were passed to keep the Bill alive, following fierce objections by the Opposition parties.
- The 49-year-old law was amended to guard against claims of succession or transfer of properties left by people who migrated to Pakistan and China.

Key points:

- The amendments proposed include that once an enemy property is vested in the Custodian, it shall continue to be vested in him as enemy property irrespective of whether the enemy, enemy subject or enemy firm has ceased to be an enemy due to reasons such as death.
- The new Bill ensures that the law of succession does not apply to enemy property; that there cannot be transfer of any property vested in the Custodian by an enemy or enemy subject or enemy firm and that the Custodian shall preserve the enemy property till it is disposed off in accordance with the Act.
- The amendments are aimed at plugging the loopholes in the Act to ensure that the enemy properties that have been vested in the Custodian remain so and do not revert to the enemy subject or firm.
- The Bill also prohibits civil courts and other authorities from entertaining disputes related to enemy property.

MISCELLANEOUS

China inducts J-20 stealth fighters

- China has inducted J-20 stealth fighters in its arsenal, marking a solid incremental step in the transition of its air force to the next level.
- The J-20 stealth fighters are designed to compete with other fifth generation fighter jets, such as the F-22 Raptor of the United States and the Russian PAK-FA.

Pakistan Parliament passes landmark Hindu Marriage Bill

- Pakistan’s Parliament has finally passed the much awaited landmark bill to regulate marriages of minority Hindus in the country.
- Pakistan’s Hindus are set to get an exclusive personal law to regulate marriages.
- The final text approved by both Houses includes the ‘Shadi Parath’ — a document similar to ‘Nikahnama’ in Islam.
- The ‘Shadi Parath’ will be required to be signed by a pandit and will be registered with the relevant government department.

NASA scientists found lost Chandrayaan-1 orbiting Moon

- Scientists at NASA’s Jet Propulsion Laboratory (JPL) have found India’s first lunar probe, Chandrayaan-1 which was considered lost, is still orbiting the moon.
- They also have found NASA’s Lunar Reconnaissance Orbiter (LRO).
- The ISRO lost communication with Chandrayaan-1 on August 29, 2009, almost a year after it was launched on October 22, 2008.
- The unmanned spacecraft is still circling some 200 km in the polar orbit around the moon

Chandrayaan-1

- Indian Space Research Organisation (ISRO) lost communication with Chandrayaan-1 on August 29, 2009, barely a year after it was launched on October 22, 2008.
- The Chandrayaan-1 mission performed high-resolution remote sensing of the moon in visible, near infrared (NIR), low energy X-rays and high-energy X-ray regions.
- One of the objectives was to prepare a three-dimensional atlas (with high spatial and altitude resolution) of both near and far side of the moon.
- It aimed at conducting chemical and mineralogical mapping of the entire lunar surface for distribution of mineral and chemical elements such as Magnesium, Aluminium, Silicon, Calcium, Iron and Titanium as well as high atomic number elements such as Radon, Uranium and Thorium with high spatial resolution.

12th Mar. 2017

GS : 2 - POLITY

The lowdown on the Bill to regulate surrogacy

- The Surrogacy (Regulation) Bill was introduced in Parliament in November 2016.
- The Bill seeks to regulate the surrogacy part of a rather flourishing infertility industry in the country.
- Defining ‘surrogacy’ as a practice in which a woman undertakes to give birth to a child for another couple and agrees to hand over the child to them after birth, the Bill allows ‘altruistic surrogacy’ — wherein only the medical expenses and insurance coverage is provided by the couple to the surrogate mother during pregnancy. No other monetary consideration will be allowed.

Commercial surrogacy picked up in India:

- India has emerged a hub for infertility treatment, attracting people from the world over with its state-of-the-art technology and competitive prices initially to treat infertility.
- Soon after, with the prevailing socio-economic inequities, underprivileged women found an option to ‘rent their wombs’ and thereby make money to take care of their expenses — often to facilitate a marriage, enable children

to get education, or provide for hospitalisation or surgery for someone in the family.

- Once information of the availability of such wombs got out, the demand also picked up. Unscrupulous middlemen inveigled themselves into the scene, and the exploitation of women began.

Issues involved:

- Several instances began to emerge after women, in desperate straits, began to file police complaints when they did not receive the promised sum. Other issues also began to crop up.
- For instance, in 2008, a Japanese couple began the process with a surrogate mother in Gujarat, but before the child was born they split and there were no takers for the child.
- In 2012, an Australian couple commissioned a surrogate mother, and arbitrarily chose one of the twins that was born. The time was ripe for regulation, or a revolt.

Key Provisions of the Bill:

- The 'intending couple,' as the Bill calls them, will be eligible if they have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
- The 'certificate of essentiality' will be issued if the couple fulfils three conditions:
 1. A certificate of infertility of one or both from a district medical board;
 2. An order of parentage and custody of the surrogate child passed by a magistrate's court;
 3. Insurance cover for the surrogate mother.
- An eligibility certificate mandates that the couple fulfil the following conditions:
 1. They should be Indian citizens who have been married for at least five years;
 2. The female must be between 23 and 50 years and the male 26 and 55 years; and
 3. They cannot have any surviving child (biological, adopted or surrogate).
 4. However, this would not include a 'child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness.'
- Conditions for surrogates:
 1. Only a close relative of the couple, who is able to provide a medical fitness certificate, can be a surrogate mother.
 2. She should have been married, with a child of her own, and must be between 25 and 35 years, but can be a surrogate mother only once.

Concerns raised:

- There are some apprehensions about the regulations being too restrictive.
- For instance, it does not allow single women or men, or gay couples to go in for surrogacy.
- It is pointed out how despite a similar stringent law, the Transplantation of Human Organs Act, organ commerce continues to thrive.
- Clearly, the issue will have to be handled firmly, even as the sensitivities of people are factored in.

GS : 2 - GOVERNMENT POLICY

Non-lapsable fund sought for arms buy

(The Hindu)

- MoD has sent a proposal to the Ministry of Finance proposing the setting up of a 'Non-lapsable Capital Fund Account'.
- The Parliamentary Standing Committee on Defence notes in its latest report that the MoD proposal is with the Finance Ministry for its 'in-principle' approval.

Why?

- A major defence purchase often takes years to complete, but the budget allocation lapses at the end of the financial year. As a result, the Ministry of Defence is often forced to return money meant for capital acquisition.

Concerns:

- However, the Finance Ministry is still not in favour of creating a 'Non-lapsable Defence Capital Fund Account' to which the committee expressed its "disappointment" and pointed to the Non-lapsable Central Pool of Resources

for the North Eastern region, which was constituted with the approval of Parliament in 1998-99.

Complicated process

- The committee observed that defence procurement and acquisition is a complicated process, involving long gestation periods and funds allocated for capital acquisition in a particular financial year are not necessarily consumed in that year and ultimately have to be surrendered by the Defence Ministry.
- The committee stated that it “would like the Ministry of Finance to look at the matter afresh” and work out the modalities for creation of the account.

GS : 3 - SCIENCE AND TECHNOLOGY

India successfully test-fires BrahMos supersonic cruise missile

(Livemint)

- India successfully test-fired the BrahMos supersonic cruise missile, which is capable of carrying a warhead of **300 kg**.

Key facts:

- The cruise missile was test fired from a mobile launcher from the Integrated Test Range (ITR) at Chandipur in Odisha.
- The **two-stage missile, one being solid and the second one ramjet liquid propellant**, has already been inducted into the Army and Navy, while the Air Force version is in final stage of trial.
- The Army is already equipped with three regiments of Block III version of Brahmos missiles. While induction of the first version of Brahmos missile system in the Indian Navy began in 2005 with INS Rajput, it is now fully operational with two regiments of the Army.

About BrahMos:

- BRAHMOS is a two stage missile with a solid propellant booster engine as its first stage which brings it to supersonic speed and then gets separated.
- The liquid ramjet or the second stage then takes the missile closer to 3 Mach speed in cruise phase.
- Stealth technology and guidance system with advanced embedded software provides the missile with special features.
- The missile has flight range of up to **290km** with supersonic speed all through the flight, leading to shorter flight time, consequently ensuring lower dispersion of targets, quicker engagement time and no interception by any known weapon system in the world.
- It operates on ‘**Fire and Forget Principle**’, adopting varieties of flights on its way to the target. Its destructive power is enhanced due to large kinetic energy on impact.
- Its cruising altitude could be up to 15 km and terminal altitude is as low as 10 meters. It carries a conventional warhead weighing 200 to 300 kgs.

GS : 3 - SCIENCE AND TECHNOLOGY

Chennai team taps AI to read Indus Script

(The Hindu)

- The Indus script has long challenged epigraphists because of the difficulty in reading and classifying text and symbols on the artefacts. Now, a Chennai-based team of scientists has built a programme which eases the process.

Key facts:

- Scientists have developed a “deep-learning” algorithm that can read the Indus script from images of artefacts such as a seal or pottery that contain Indus writing.
- Scanning the image, the algorithm smartly “recognises” the region of the image that contains the script, breaks it up into individual graphemes (the term in linguistics for the smallest unit of the script) and finally identifies these using data from a standard corpus. In linguistics the term corpus is used to describe a large collection of texts which, among other things, are used to carry out statistical analyses of languages.
- The algorithms come under a class of artificial intelligence called “**deep neural networks**.”
- These have been a major part of the game-changing technology behind self-driving cars and Go-playing bots that surpass human performance. The deep neural network mimics the working of the mammalian visual cortex, known as convolutional neural network (CNN), which breaks the field into overlapping regions. The features found in each region are hierarchically combined by the network to build a composite understanding of the

whole picture.

• The process consists of **three phases**:

1. In the first phase, the input images are broken into sub-images that contain graphemes only, by trimming out the areas that do not have graphemes.
2. The grapheme-containing areas are further trimmed into single-grapheme pieces.
3. Lastly, each of these single graphemes is classified to match one of the 417 symbols discovered so far in the Indus script.

Indus script

- The Indus valley script is **much older** than the Prakrit and Tamil-Brahmi scripts. However, unlike the latter two, it has not yet been deciphered because a bilingual text has not yet been found.
- A bilingual text has in many other cases aided archaeologists in understanding ancient scripts, for example, the Rosetta stone. This stone which was found in the eighteenth century carries inscriptions of a decree, issued in 196 BCE, in three parts, the first two in ancient Egyptian hieroglyphic and the Demotic scripts, while the bottom is in Ancient Greek.
- Since the decree was the same, the Rosetta stone provided the key to deciphering Hieroglyphs. For the lack of such a “Rosetta stone,” the Indus script remains undeciphered today.

13th Mar. 2017

GS : 2 - INTERNATIONAL INSTITUTIONS

India to lose presence on U.N. scientific panel

(The Hindu)

- Even as India strenuously lobbies for seats in global high tables such as the United Nations Security Council and the Nuclear Suppliers Group, it will — for the first time in two decades — not have a member in a prestigious, U.N. scientific body that decides what portions of the seabed can be exclusively mined for natural resources such as oil, precious metals and minerals.

Key facts:

- The Ministry of External Affairs (MEA), which formally nominates Indian candidates, chose to nominate a person to another U.N. body, called **the International Tribunal for the Law of the Sea (ITLOS)**.
- India’s current member to the 21-person body, called **Commission on Legal Continental Shelf (CLCS)** and part of the United Nations Convention on the Law of the Sea (UNCLOS). But, this year India has decided not to field a candidate for the upcoming election.

Repercussions:

- The CLCS has a five-year tenure and elections are due in June for the 2017-2022 term. Not having an Indian in this 21-member group would mean that China and Pakistan would likely “grab” two of the five seats allotted to the so-called Asia-Pacific group.
- Apart from signalling prestige, a membership of the commission allows India to gauge the scientific strength of claims by countries to parts of the seabed that, like territorial waters, are often hard to demarcate. Such information is privy only to participants. India has had disputes with several neighbours — Pakistan, Bangladesh and Sri Lanka — over how the continental shelf (the seabed under the Arabian Sea, the Indian Ocean and the Bay of Bengal) can be fairly distributed.

EEZ extension:

- India has huge interest in CLCS and applied for extending the Exclusive Economic Zone (EEZ) up to 350 nautical miles from the existing 200 nautical miles. India’s submission to CLCS will likely come up for scrutiny later this year, and Sri Lanka, which has claimed a larger area than India, will be examined first. India’s application number is 48, while Sri Lanka’s is 43.

About Commission on the Limits of the Continental Shelf:

- The purpose of the Commission on the Limits of the Continental Shelf (the Commission or CLCS) is to facilitate the implementation of the **United Nations Convention on the Law of the Sea** (the Convention) in respect of the establishment of the outer limits of the continental shelf beyond 200 nautical miles (M) from the baselines from which the breadth of the territorial sea is measured.

- Under the Convention, the coastal State shall establish the outer limits of its continental shelf where it extends beyond 200 M on the basis of the recommendation of the Commission.
- The Commission shall make recommendations to coastal States on matters related to the establishment of those limits; its recommendations and actions shall not prejudice matters relating to the delimitation of boundaries between States with opposite or adjacent coasts.
- In CLCS, the sitting members from the Asia-Pacific region are China, Japan, South Korea, Pakistan, Malaysia and India, and all countries, except India, are learnt to be sending candidates for both posts.
- While ITLOS is a judge position and the appointee is paid annual wages, there is no remuneration for the sitting CLCS member.
- India became a signatory to the UNCLOS in 1982 and has had continuous representation in CLCS, ITLOS and the International Seabed Authority (ISA) since their inception in 1997, 1996 and 1994 respectively.

GS : 2 - POLITY

Lok Sabha Passes the Admiralty Bill, 2016

(PIB + PRS)

- The Lok Sabha has passed the Admiralty (Jurisdiction and Settlement of Maritime Claims) Bill, 2016. The Bill aims to establish uniform legal framework by consolidating the existing laws relating to admiralty jurisdiction of courts, admiralty proceedings on maritime claims, arrest of vessels and related issues.
- It also aims to repeal five obsolete British statutes (laws) on admiralty jurisdiction in civil matters which are 126 to 177 years old and were hindering efficient governance.
- The five laws are Admiralty Court Act, 1840; Admiralty Court Act, 1861; Colonial Courts of Admiralty Act, 1890; Colonial Courts of Admiralty (India) Act, 1891; and Provisions of the Letters Patent, 1865.

The Admiralty (Jurisdiction and Settlement of Maritime Claims) Bill, 2016

- The Admiralty (Jurisdiction and Settlement of Maritime Claims) Bill, 2016 was introduced in Lok Sabha on November 21, 2016 by the Minister of State for Shipping, Mr. Mansukh Mandaviya. The Bill seeks to consolidate the existing laws on civil matters of admiralty jurisdiction of courts, admiralty proceedings on maritime claims, and arrest of ships. Admiralty laws deal with cases of accidents in navigable waters or involve contracts related to commerce on such waters. The Bill repeals laws such as the Admiralty Court Act, 1861, the Colonial Courts of Admiralty Act, 1890. Key features of the Bill include:
 - **Admiralty jurisdiction:** The jurisdiction with respect to maritime claims under the Bill will vest with the respective High Courts and will extend up to the territorial waters of their respective jurisdictions. The central government may extend the jurisdiction of these High Courts. Currently admiralty jurisdiction applies to the Bombay, Calcutta and Madras High Courts. The Bill further extend this to the High Courts of Karnataka, Gujarat, Orissa, Kerala, Hyderabad, and any other High Court notified by the central government.
 - **Maritime claims:** The High Courts may exercise jurisdiction on maritime claims arising out of conditions including: (i) disputes regarding ownership of a vessel, (ii) disputes between co-owners of a vessel regarding employment or earnings of the vessel, (iii) mortgage on a vessel, (iv) construction, repair, or conversion of the vessel, (v) disputes arising out of the sale of a vessel, (vi) environmental damage caused by the vessel, etc. The Bill defines a vessel as any ship, boat, or sailing vessel which may or may not be mechanically propelled.
 - While determining maritime claims under the specified conditions, the courts may settle any outstanding accounts between parties with regard to the vessel. They may also direct that the vessel or a share of it be sold. With regard to a sale, courts may determine the title to the proceeds of such sale.
 - **Priority of maritime claims:** Among all claims in an admiralty proceeding, highest priority will be given to maritime claims, followed by mortgages on the vessel, and all other claims. Within maritime claims, the highest priority will be given to claims for wages due with regard to employment on the vessel. This would be followed by claims with regard to loss of life or personal injury in connection with the operation of the vessel. Such claims will continue to exist even with the change of ownership of the vessel.
 - **Jurisdiction over a person:** Courts may exercise admiralty jurisdiction against a person with regard to maritime claims. However, the courts will not entertain complaints against a person in certain cases. These include: (i) damage, or loss of life, or personal injury arising out of collision between vessels that was caused in India, or (ii) non-compliance with the collision regulations of the Merchant Shipping Act, 1958 by a person who does not reside or carry out business in India. Further, Courts will not entertain action against a person until any case against them with regard to the same incident in any court outside India has ended.
 - **Arrest of vessel:** The courts may order for the arrest of any vessel within their jurisdiction for providing security

against a maritime claim which is the subject of a proceeding. They may do so under various reasons such as: (i) owner of the vessel is liable for the claim, (ii) the claim is based on mortgage of the vessel, and (iii) the claim relates to ownership of the vessel, etc.

- **Appeals:** Any judgments made by a single Judge of the High Court can be appealed against to a Division Bench of the High Court. Further, the Supreme Court may, on application by any party, transfer an admiralty proceeding at any stage from one High Court to any other High Court. The latter High Court will proceed with the matter from the stage where it stood at the time of the transfer.
- **Assessors:** The central government will appoint a list of assessors qualified and experienced in admiralty and maritime matters. The central government will also determine the duties of assessors, and their fee. Typically, assessors assist the judges in determining rates and claims in admiralty proceedings.

MISCELLANEOUS

Bangladesh declares March 25 as 'Genocide Day'

- Bangladesh unanimously adopted a resolution declaring March 25 as Genocide Day, in remembrance of the atrocities carried out by the Pakistani Army in the night of March 25, 1971
- **Operation Searchlight:** The Pakistan Army swooped on unarmed civilians on the night of March 25, 1971, to crush the Bengali rebellion following refusal by the military leadership to accept the election results of 1970 in which the Awami League got thumping majority.

14th Mar. 2017

GS : 3 - ENERGY

NTPC installs India's largest Floating Solar PV Plant in Kerala

(Indian Express)

- State-run NTPC (National Thermal Power Corporation Limited) has installed India's largest floating solar photovoltaic (PV) plant at Rajiv Gandhi Combined Cycle Power Plant (RGCCPP) at Kayamkulam in Kerala.
- The 100 kWp (kilowatt peak) floating solar PV plant has been indigenously developed as a part of Union Government flagship 'Make In India' initiative.
- It has been indigenously developed by NETRA (NTPC Energy Technology Research Alliance), R&D arm of NTPC, in collaboration with Central Institute of Plastic Engineering & Technology (CIPET), Chennai.

Key points:

- Floating solar PV systems are fast emerging as an alternative to conventional ground mounted PV systems which are land intensive.
- It can also be installed on saline water environment. It has various benefits like conserving water through reduction of evaporation, increased power generation due to cooling effect on the panels, reduced installation time etc.
- Installation potential of such type of floating systems in India is huge because of abundance of water bodies. Particularly in Kerala this type of system has a great potential due to availability of water bodies and lack of presence of enough land.

National Thermal Power Corporation Limited (NTPC)

- NTPC limited is a Central Public Sector Undertaking (CPSU), operational under the Ministry of Power.
- It is India's largest power generator and accounts for 25% of total electricity generated in the country.
- It was established in 1975 by Union Government which now holds 70% of its equity shares as of May 2015 (after divestment of its stake in 2004, 2010, 2013, and 2015).

GS : 2 - MULTILATERAL GROUPING

India, Pak. in SCO will ensure security of region, says China

- China hoped the admission of India and Pakistan into the Beijing-led Shanghai Cooperation Organisation (SCO) security grouping will contribute to security and stability in the region.
- Currently, all sides are going through relevant legal procedures in accordance with the Memorandum of Obligations signed at last year's SCO summit at Tashkent to admit India and Pakistan.

Shanghai Cooperation Organisation (SCO)

- The Shanghai Cooperation Organisation (SCO), or Shanghai Pact, is a Eurasian political, economic, and military organisation which was founded in 2001 in Shanghai by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan.
- These countries, except for Uzbekistan had been members of the Shanghai Five, founded in 1996; after the inclusion of Uzbekistan in 2001, the members renamed the organisation.
- On July 10, 2015, the SCO decided to admit India and Pakistan as full members.
- India and Pakistan signed the memorandum of obligations on 24 June 2016 at Tashkent, thereby starting the formal process of joining the SCO as full members.
- The acceptance process will take some months, by which they are expected to become full members by the next meeting at Astana in 2017.

GS : 2 - INTERNATIONAL

Report on defence released by Parliament’s Standing Committee

(Business Standards)

- Parliament’s Standing Committee on Defence released a new report.
- This report is an authoritative declaration from the government of India.

Key Points of report:

- The United States has been India’s biggest supplier of weapons platforms over the past three years.
- It is followed by Russia, Israel and France in that order.
- India also signed contracts worth around Rs 7000 crore with others, which include Germany, the UK, Ukraine and Poland.
- The committee also demolishes the myth of substantial indigenous production by citing orders placed on defence public sector undertakings (DPSUs) and Ordnance Factories (OFs).
- The report details the extent to which orders for “indigenous” weapon systems and equipment actually pay for imported equipment.
- This is because the equipment supplied by DPSUs and OFs contains many components, sub-systems and systems acquired from foreign vendors.
- e.g Hindustan Aeronautics Ltd retains the import content of the Sukhoi-30MKI fighter at 44%, even after building it in India under licence for over a decade.

INDIA'S FOREIGN ARMS PARTNERS

₹cr

	2013-14		2014-15		2015-16		Total
	Contracts	Value	Contracts	Value	Contracts	Value	
Russia	2	1,342	7	6,085	3	947	8,374
Israel	5	3,751	1	875	4	2,979	7,605
USA	7	6,787	2	58	4	22,050	28,895
France	2	299	3	1,537	0	0	1,836
Others	5	1,072	5	2,707	6	3,195	6,974
Total	21	13,251	18	11,262	17	29,172	53,685

Source: Standing Committee on Defence, Report No. 31

GS : 2 - SOCIAL

Sahayak System

(Indian Express)

Why in news?

- Videos surfaced on social media over the past couple of weeks where army personnel’s accused some officers treating their subordinates as “slaves”.

Sahayak system in the Indian Army:

- Officers of the colonial period needed help when they are in battle. To help them they were supposed to have a retinue of servants.
- Thus evolved the concept of ‘batman’, short for ‘Battle Man’, wherein a young soldier helped out an officer with some of his mundane activities.
- The practice has since been codified via an Army Order and other policy letters into the Sahayak system. No official figure is available, but an estimated 50,000 Sahayaks serve in the Army.

Key points:

- Unlike a chef or a hairdresser or a housekeeper, there is no trade called Sahayak in the Army.

- The usual practice in units is to employ a young soldier, and rotate the soldiers doing the duty of a Sahayak.
- It is supposed to be a voluntary job.
- If any soldier expresses a desire to not be a Sahayak, he is supposed to be excused.

Steps taken to remove Sahayak System:

- The Army has responded by reiterating orders and guidelines on the use of Sahayaks, and by asking officers to ensure that a soldier is not employed on unauthorized duty.
- It has also proposed the hiring of non-combatants for permanent deployment at major peace stations to perform these duties.
- This proposal, first made in 2012, has been revived recently, and is expected to free more than 25,000 soldiers employed as Sahayaks.

MISCELLANEOUS

Ancient Jainism site in Karnataka:

- Aratipura, the ancient site which belongs to 9-14th century had been one of the most important Jain religious complexes in Karnataka. It is also called as Tipruru and surrounded by the Kanakagiri hills.
- The artifacts belong to the Ganga and Hoyasala dynasties that ruled this region between 9th and 14th century.
- The script and language of the inscriptions found in the site were in the Kannada of the Hoysala period.
- The site is known for the sculpture of Parsvanatha, the 23rd Tirthankarain the Jain pantheon, standing on a lotus pedestal under the hood of snake.
- There is also a 2.2-metre sculpture of Bahubali stands on Shravana Betta that predates the one at Sravanabelagola.
- The monolithic statue of Bahubali at Shraavanabelagola was carved from a single block of granite.
- It was built by the Ganga Dynasty Minister Chavundaraya in 10th Century and it is 17 m tall, one of the largest free-standing statues in the world.

Vaccine Safety Net:

- It was launched in 2003. It is a global network of vaccine safety websites, evaluated by the WHO.
- It has 47 member websites in 12 languages.
- Websites are subjected to severe vetting by the Vaccine Safety Net before being approved to become a member.
- Websites are required to contain correct, unbiased information about vaccine safety and have no links with the industry to become a member The Indian Academy of Paediatrics' Advisory Committee on Vaccines and Immunisation Practices (ACVIP) is one of the members of the network.
- U.S. President Donald Trump has raised the accusations of the vaccine induced autism through several tweets.
- The Institute for Vaccine Safety, which is a member of network, posted an article last month explaining why vaccines do not cause autism.

15th Mar. 2017

GS : 2 - GOVERNMENT INTERVENTIONS (BILLS)

Inter-state River Water Disputes (Amendment) Bill, 2017 introduced in Lok Sabha

(The Hindu, PIB)

- Union Minister of Water Resources, River Development and Ganga Rejuvenation introduced Inter-State River Water Disputes (Amendment) Bill, 2017 in Lok Sabha.

Key points related Bill:

- The Bill proposes a Single Standing Tribunal (with multiple benches) instead of existing multiple tribunals, which shall consist of one Chairperson, one Vice-Chairperson and not more than six other Members.
- While the term of office of the Chairperson is five year or till he attains the age of 70 years, whichever is earlier
- The term of office of Vice Chairperson and other member of tribunal shall be co-terminus with the adjudication of the water dispute.

- Bill also provides for the appointment of Assessors to provide technical support to the tribunal. They shall be appointed from amongst experts serving in the Central Water engineering Service not below the rank of Chief Engineer.
- The total time period for adjudication of dispute has been fixed at maximum of four and half years.
- The decision of the Tribunal shall be **final and binding with no requirement of publication** in the official Gazette.

Other provisions:

- The Bill also proposes to introduce mechanism to resolve the dispute amicably by negotiations, through a Dispute Resolution Committee (DRC) to be established by the Central Government consisting of relevant experts, before such dispute is referred to the tribunal.
- The Bill also provides for transparent data collection system at the national level for each river basin and for this purpose, an agency to maintain data-bank and information system shall be appointed or authorized by Central Government.

Background:

- Inter-state river water disputes are on the rise on account of increase in water demands by the States.
- The Inter State Water Dispute Act, 1956 which provides the legal framework to address such disputes, suffers from many drawbacks. Under this Act, a separate Tribunal has to be established for each Inter State River Water Dispute.
- Only three out of eight Tribunals have given awards accepted by the States, while Tribunals like Cauvery and Ravi Beas have been in existence for over 26 and 30 years respectively without any award.

GS : 2 - GOVERNMENT PROGRAMMES AND POLICIES

Mission Fingerling to achieve Blue Revolution

(PIB)

- Recognizing the potential and possibilities in the fisheries sector, Government of India has envisaged a program named "Blue Revolution" to unlock the country's latent potential through an integrated approach.
- Fish Fingerling production is the single most important critical input visualised to achieve fish production targets under the Blue Revolution.

Key points:

- The Department has identified 20 States based on their potential and other relevant factors to strengthen the Fish Seed infrastructure in the country.
- This program with a total expenditure of about Rs. 52000 lakh will facilitate the establishment of hatcheries and Fingerling rearing pond to ensure the fish production of 426 crores fish fingerling, 25.50 crores Post Larvae of shrimp and crab in the country.
- This will converge in the production of 20 lakh tonnes of fish annually and will benefit about 4 million families.
- The implementation of this program will supplement the requirement of stocking materials in the country up to a large extent, which is a much needed input to achieve the enhanced fish production.

Blue Revolution:

- The Blue Revolution, in its scope and reach, focuses on creating an enabling environment for an integrated and holistic development and management of fisheries for the socio economic development of the fishers and fish farmers.
- Greater emphasis will be on infrastructure with an equally strong focus on management and conservation of the resources through technology transfer to increase in the income of the fishers and fish farmers.
- Productivity enhancement shall also be achieved through employing the best global innovations and integration of various production oriented activities such as: Production of quality fish seeds, Cost effective feed and adoption of technology etc.

GS : 2 - GOVERNMENT COMMITTEES

Madhukar Gupta Committee on border protection submits report

(The Hindu)

- The Madhukar Gupta Committee on border protection has submitted its report to the Union Government to strengthen border protection and address vulnerabilities in fencing along the Indo-Pakistan border.
- The committee has given broad recommendations on the issues of Threats and Border Protection, assessment of

force level, deployment on the border, infrastructure and technology issues for protection of border and administrative issues.

- The Union Government has decided to initiate action in light of the recommendations of the Committee in consultation with the stakeholders.

GS : 3 - ENVIRONMENT (BIODIVERSITY)

Scientists discover world's first fluorescent frog in Argentina

(The Hindu)

- Scientists have discovered polka dot tree frog (*Hypsiboaspunctatus*), the world's first fluorescent frog in Argentina.

Key points:

- The newly discovered amphibian sports a muted palette of greens, reds and yellows under normal light, but in the dark gives off a bright blue and green glow.
- Scientists expect to find red fluorescence in these frogs from a pigment called In some insects, proteins bound to biliverd in emit a faint red fluorescence.
- In ultraviolet flashlight (or black light), polka dot tree frogs gave off an intense greenish-blue glow instead of a faint red.
- Three molecules hyloin-L1, hyloin-L2 and hyloin-G1 were responsible for green fluorescence. These molecules contain a ring structure and a chain of hydrocarbons, and are unique among the known fluorescent molecules in animals.

GS : 2 - GOVERNMENT INTERVENTIONS

10 recommendations of Subramanian Committee on new education policy

(Livemint, Indian Express)

Why in news?

- The government has decided to junk the TSR Subramanian committee report on education reform.
- The ministry will soon announce another committee to give a fresh report.
- In 2015, the TSR Subramanian was set up to give a new education policy, which submitted its report in May, 2016.

Original report's recommendations:

- The original report bans the political parties from universities. However it is not present in the officially published report.
- Banning political parties from the campus is unlikely to go down well with the political class considering this is where they get recruits from.
- It had talked of the need for a standing Education Commission to continually assess the changing circumstances of the education sector and advise the HRD ministry on the need to upgrade policy accordingly.
- At the school level, it proposed that the Right to Education Act be amended to include mandatory learning outcome norms with the existing norms on infrastructure.
- It wanted to bring minority institutions under the purview of applicability of the Economically Weaker Sections quota.
- It had recommended that the selection of teachers for government schools be handled by an autonomous body to reduce corruption and politicisation.
- On the higher education front, it had called for a "flexible and nuanced" regulatory regime that allowed high-quality institutions much greater freedom than before on financial and administrative decisions.
- It suggested that accreditation of quality be made more outcome-based instead of being based on input metrics such as spending on infrastructure.

Way ahead:

- It is the government's prerogative to accept, fully or partially, or reject a report it commissioned.
- But junking a report that had many progressive recommendations is odd.
- Some of the recommendations it made represented a radical change from the past thinking and some aren't

entirely new.

- But together they could have proven a worthy template for the country's education policy.
- The government should retain the best of what the Subramanian panel had recommended.

MISCELLANEOUS

Ornamental fishery:

- It is a sub-sector of the fisheries sector dealing with breeding and rearing of coloured fish of both freshwater and marine water.
- There are about 400 species of marine ornamental fishes and 375 freshwater ornamental varieties are available in various parts of the India.
- The Union Government is going to launch pilot project on ornamental fisheries in 8 potential States with total outlay of over 61 crore rupees.
- These 8 potential States identified includes Assam, West Bengal , Odisha, Maharashtra , Gujarat , Karnataka , Tamil Nadu and Kerala

16th Mar. 2017

GS : 2 - BILATERAL RELATIONS

Cabinet approves of MoU between India and Bangladesh on Aids to Navigation (AtoNs)

- The Union Cabinet has approved signing of a Memorandum of Understanding (MoU) on **Aids to Navigation (AtoNs)** between the Directorate General of Lighthouses & Lightships (DGLL), Ministry of Shipping, Government of India and the Department of Shipping, Government of Bangladesh.

Key facts:

- The MoU envisages cooperation between Bangladesh and India:
 - a. To extend advice on lighthouses and beacons;
 - b. To extend advice on Vessel Traffic Service and chain of Automatic Identification System (AIS); and
 - c. To impart training as per **International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)** training module to AtoN Managers and Technicians for Bangladesh.
- The MoU will enable both the countries to collaborate in the following areas:
 - a. To provide advice on AtoNs;
 - b. Provide academic interaction by imparting training to AtoN personnel; and
 - c. Provide necessary cooperation in organizing workshops/conferences for enhancement of skills in AtoN field.
- The MoU will also help in greater cooperation in capacity building in the field of AtoN training in the South Asian region. This will give a boost to imparting training on the management of marine aids to navigation based on IALA Model Course E-141/1 and accordingly facilitate the delivery of a professional training course as per the IALA guidelines.
- India and Bangladesh are two important developing nations in the South Asian region. Both countries maintain a long tradition of friendly and cordial relations which has been manifested in the several bilateral visits of dignitaries from both sides during recent years.

Background:

- As per **International Maritime Organisation's (IMO's)** requirement, authorities in various countries, provide appropriate Aids to Navigation in their waters as per international recommendations and guidelines.
- IALA is the international body coordinating and harmonizing the use of all Aids to Navigation.
- India represented through DGLL, is a member of IALA Council.
- As a step towards regional cooperation, India and Bangladesh have signed a Memorandum of Understanding for cooperation on AtoN.

- As per the MoU, the DGLL on behalf of Ministry of Shipping, Government of India shall advise its counterpart Department of Shipping, Ministry of Shipping, Bangladesh on AtoNs including Vessel Traffic Service, Chain of Automatic Identification System.

GS : 2 - GOVERNMENT POLICY

Centre to Launch Pilot Project on Ornamental Fisheries

- The Department of Animal Husbandry, Dairying and Fisheries, the Ministry of Agriculture and Farmers Welfare, has envisaged a program to unlock the country's ornamental fisheries sector through a special drive by launching a pilot scheme for the development of ornamental fisheries.

Key facts:

- Implementation of the pilot-scale Ornamental Fisheries Project focuses mainly on creating an enabling environment for a sustainable and holistic development of Ornamental Fisheries for the socio-economic development of the people involved in this activity as well as for exports.
- The thrust areas have been identified for enhancing ornamental fisheries production through cluster-based farming and conservation of natural resources, both inland and marine, through habitat restoration and creating awareness amongst the stakeholders.

The major objectives of the pilot project are:

- (i) to promote ornamental fish culture with cluster-based approach,
 - (ii) to augment ornamental fisheries trade and export earnings,
 - (iii) to create employment opportunities for the rural & periurban population and (iv) use of modern technology and innovation to make ornamental fisheries a thriving activity.
- For the purpose of implementation of the pilot project, a total of 8 potential States have been identified, viz., Assam, West Bengal, Odisha, Maharashtra, Gujarat, Karnataka, Tamil Nadu and Kerala.
 - All the activities under the pilot project are classified in to four major groups, viz.,
 - a. activities related to production of ornamental fish, e.g. setting up of backyard rearing units, medium scale units, integrated breeding-cum-rearing units, etc.,
 - b. activities related to aquarium fabrication, trade and marketing;
 - c. activities for promotion of ornamental fisheries sector, and d: activities related to skill development and capacity building.
 - The pilot project on ornamental fisheries shall be implemented by the National Fisheries Development Board (NFDB) through the Fisheries Departments of States/UTs.
 - The broad funding patterns proposed under the pilot project on ornamental fisheries are in line with the funding patterns under **CSS Blue Revolution: Integrated Development and Management of Fisheries**.
 - Ornamental fishery, on the other hand, is a sub-sector of the fisheries sector dealing with breeding and rearing of coloured fish of both freshwater and marine water. Though ornamental fisheries does not directly contribute to the food and nutritional security, it generates livelihood and income for the rural and periurban population, especially women and unemployed youth as part-time activities.

GS : 2 - GOVERNMENT POLICY

Mission Fingerling to achieve Blue Revolution

(PIB)

- Government of India has envisaged a program named "Blue Revolution" to unlock the country's latent potential through an integrated approach.
- The Blue Revolution, in its scope and reach, focuses on creating an enabling environment for an integrated and holistic development and management of fisheries for the socio economic development of the fishers and fish farmers.

Key facts:

- Thrust areas have been identified for enhancing fisheries production from 10.79 mmt (2014-15) to 15 mmt in 2020-21.
- Fish Fingerling production is the single most important critical input visualised to achieve fish production targets

under the Blue Revolution.

- The Department has identified 20 States based on their potential and other relevant factors to strengthen the Fish Seed infrastructure in the country.

GS : 3 - ECONOMY

Launch of Trade Infrastructure for Export Scheme (TIES)

(PIB)

- Commerce and Industry Minister launched the Trade Infrastructure for Export Scheme (TIES).
- The Scheme is focussed on addressing the needs of the exporters.

Key facts:

- The focus is not just to create infrastructure but to make sure it is professionally run and sustained.
- The scheme would provide assistance for setting up and up-gradation of infrastructure projects with overwhelming export linkages like the Border Haats, Land customs stations, quality testing and certification labs, cold chains, trade promotion centres, dry ports, export warehousing and packaging, SEZs and ports/airports cargo terminuses.
- **About TIES-** After delinking of the ASIDE Scheme in 2015, the State Governments have been consistently requesting the support of the Centre in creation of export infrastructure. This support is imperative to act as an inducement to the States to channelize funds from their increased devolution towards creation of export infrastructure. The objective of the proposed scheme is to enhance export competitiveness by bridging gaps in export infrastructure, creating focused export infrastructure, first mile and last mile connectivity for export-oriented projects and addressing quality and certification measures.
- The Central and State Agencies, including Export Promotion Councils, Commodities Boards, SEZ Authorities and Apex Trade Bodies recognised under the EXIM policy of Government of India; are eligible for financial support under this scheme.
- The Central Government funding will be in the form of grant-in-aid, normally not more than the equity being put in by the implementing agency or 50% of the total equity in the project. (In case of projects located in North Eastern States and Himalayan States including J&K, this grant can be upto 80% of the total equity).The grant in aid shall, normally, be subject to a ceiling of Rs 20 Cr for each infrastructure project.

GS : 2 - GOVERNMENT POLICIES

Hyderabad best city to live in, beats Delhi, Mumbai for third time

- For the third consecutive time, Hyderabad emerged as the Indian city with the best quality of living, according to Mercer's Quality of Living rankings 2017.
- Globally, Vienna walked away with the honour, for the fourth time in a row.

Key facts:

- Mercer, head-quartered in **New York**, is a global human resources consulting firm.
- While Hyderabad maintained its ranking at the national-level, it slipped five notches below since last year in the overall rankings. Yet, both Hyderabad and Pune stood higher on the charts than the country's more "traditional business centres", Mumbai and New Delhi, ranked at 154 and 161 respectively.
- What worked in favour of Hyderabad, as per the report, is its "relatively lower crime rate, lesser air pollution and improved options for international and reputable English speaking schools.
- Mercer's survey, covering over 230 cities across the globe, is conducted annually to enable
- While the report applauded Hyderabad's "efficient police force" and relatively better quality of air, it did indicate that the city fared poorly in civic amenities.

MISCELLANEOUS

Madhukar Gupta Committee Report

(PIB)

- The Committee constituted under the Chairmanship of **Shri Madhukar Gupta**, has submitted its report to the Government to strengthen border protection and address vulnerabilities in fencing along the Indo-Pakistan border.

Key facts:

- The Committee has given its recommendations broadly on the issues of Threats and Border Protection, assessment of force level, deployment on the border, infrastructure and technology issues for protection of border and administrative issues.
- It has been decided to initiate action in light of the recommendations of the Committee in consultation with the stakeholders.

Coal Bed Methane (CBM)

- Coal Bed Methane (CBM) is an unconventional form of natural gas found in coal deposits or coal seams.
- CMB is formed during the process of **coalification**, the transformation of plant material into coal. It is considered a valuable energy resource with reserves and production having grown nearly every year since 1989.
- Varied methods of recovery make CBM a **stable source of energy**.
- CBM can be recovered from underground coal before, during, or after mining operations. It can also be extracted from **“unminable”** coal seams that are relatively deep, thin or of poor or inconsistent quality. Vertical and horizontal wells are used to develop CBM resources.
- Extraction requires drilling wells into the coal seams and removing water contained in the seam to reduce hydrostatic pressure and release absorbed (and free) gas out of the coal.
- Methane is a greenhouse gas emitted through CBM extraction. Global methane emissions from coal mines are projected to account for approximately 8 percent of total global methane emissions.

17th Mar. 2017

GS : 2 - BILATERAL RELATIONS INDIA-PAKISTAN

Gilgit-Baltistan to be declared a Province

(The Hindu)

- Pakistan is planning to declare the strategic Gilgit-Baltistan region as its fifth Province, a move that may raise concerns in India as it borders the disputed Pakistan-occupied Kashmir.

Key facts:

- A constitutional amendment would be made to change the status of the region, through which the \$46 billion China-Pakistan Economic Corridor passes.
- Gilgit-Baltistan is treated as a separate geographical entity by Pakistan. It has a regional Assembly and an elected Chief Minister. It is believed that China’s concerns about its unsettled status prompted the move, which could signal a historic shift in the country’s position on the future of the wider Kashmir region.

GS : 2 - POLITY

Ban lawmakers from practising other professions: plea in SC

(The Hindu)

- A petition has been filed in the Supreme Court seeking to ban legislators from practising other professions, including as advocates.

What does the petition say?

- The petition said the restriction imposed on public servants and judges against engaging in other professions should apply to lawmakers.
- Many legislators who double up as advocates are even retainers of big corporate bodies entities, thus giving rise to a situation of conflict of interest between their constitutional duties as a legislator and a lawyer meant to vouchsafe the private interests of their client.
- It is said that with 543 Lok Sabha MPs representing more than 1.3 billion people, a Member of Parliament on an average represents more than 2.25 million people. Similarly, a Rajya Sabha MP is the voice of his State in Parliament, and as such, has a very important role in our federal political system. The primary role of an MP is as a legislator. Thus, MPs must attend Parliament every day and dedicate themselves full time for the welfare of people.

GS : 2 - GOVERNMENT POLICIES

National Health Policy 2017

(Indian Express)

- The Union Cabinet has approved the National Health Policy 2017 after having deferred it twice before. The last

health policy was issued 15 years ago in 2002.

- The National Health policy marks a historic moment in our endeavour to create a healthy India where everyone has access to quality healthcare.
- Aiming to provide healthcare in an “assured manner” to all, the policy will strive to address current and emerging challenges arising from the ever-changing socio-economic, technological and epidemiological scenarios.

Primary features

- The policy advocates a progressively incremental assurance-based approach. It envisages providing larger package of assured comprehensive primary health care through the ‘Health and Wellness Centres’ and denotes important change from very selective to comprehensive primary health care package which includes care for major NCDs [non-communicable diseases], mental health, geriatric health care, palliative care and rehabilitative care services.
- It aims to allocate major proportion of resources to primary care and intends to ensure availability of two beds per 1,000 population distributed in a manner to enable access within golden hour [the first hour after traumatic injury, when the victim is most likely to benefit from emergency treatment].
- In addition, the policy proposes **free drugs, free diagnostics and free emergency and essential health care services** in all public hospitals in a bid to provide access and financial protection.
- It also envisages a **three-dimensional integration of AYUSH systems** encompassing cross referrals, co-location and integrative practices across systems of medicines. It also boasts of having an effective grievance redressal mechanism.

Impact on Gross Domestic Product

- The policy proposes raising public health expenditure to 2.5 per cent of the GDP in a time-bound manner. According to the Health Minister, the 2.5 per cent of GDP spend target for this sector would be met by 2025.

Key targets

- Among key targets, the policy intends to **increase life expectancy at birth from 67.5 to 70 by 2025** and **reduce infant mortality rate to 28 by 2019**. It also aims to **reduce under five mortality to 23** by the year 2025. Besides, it intends to achieve the global 2020 HIV target.

Deficiencies

- The indication that the policy would adopt an “**assurance-based approach**” itself abandons a radical change proposed in the draft policy of 2015 — that of a National Health Rights Act aimed at making health a right.
- It reiterates health spend targets set by the High Level Expert Group (HLEG) set up by the erstwhile Planning Commission for the 12th Five Year Plan (which ends on March 31, 2017), in addition to failing to make health a justiciable right in the way the Right to Education 2005 did for school education.

GS : 3 - ECONOMY

Start-up firms may soon find it easy to wind up

(The Hindu)

- To enable faster exit for start-ups and to bring the winding up process in line with global best practices, the Department of Industrial Policy and Promotion (DIPP) has written to the Ministry of Corporate Affairs (MCA) to notify start-ups as ‘Fast Track firms.’
- Once this is notified, start-ups shall be able to wind up their business within a period of 90 days from making an application for the same.

Key facts:

- The DIPP is the nodal Central government body for the Start-up India initiative, while the MCA is the concerned authority for notifications on winding up of companies. Fast Track firms will be start-ups with simple debt structures or those meeting certain criteria that will be specified.
- The ‘Bharat Navodaya: Start-Up India Reform Report’, had recommended expediting the company winding up process in India, “which is currently long-drawn and requires substantial documentation.”
- It pointed out that winding up in the U.K. can be initiated by downloading a simple form and calling for a

shareholders meeting.

- The report said expediting the company winding up process in India would require the notification of Sections 304-323 of the Companies Act, 2013, relating to voluntary winding up. The benefits of voluntary winding up operations involve no court supervision.
- The Insolvency and Bankruptcy Board of India has been constituted and the provisions regarding corporate insolvency resolution have been implemented on December 1, 2016. The provisions related to liquidation have been notified on December 9, 2016.

Key Concerns:

- The long process, paper work and costs involved in the closure are the main reasons why several companies remain dormant. In some instances, entrepreneurs may continue to run companies on paper, filing tax returns and preparing annual reports every year, even if it is no longer operational.

GS : 2 - GOVERNANCE

CAG pulls up I-T Dept. on shell companies

(The Hindu)

- The Comptroller and Auditor-General (CAG) has pulled up the Income Tax Department for not putting to use the tools at its disposal for effective action against shell companies that conceal unaccounted-for income and generate black money, specifically with respect to Maharashtra Sales Tax Department findings.

Issue:

- In its latest report, the CAG said the State department's website had a list of 2,059 suspicious dealers who had issued invoices involving tax evasion of over ₹10,640 crore.
- The auditor had sought details from the I-T Department in Mumbai on the assesses and the ultimate beneficiaries, but despite reminders, the data were not provided.
- In 2008-09, the MSTD had informed the Bombay High Court that it had investigated 1,555 hawala operators involving 39,488 beneficiary dealers who had passed on an input tax credit of ₹1,333 crore in three years.
- The accused claimed and got input tax credit against the declaration of fake tax invoices without actual transactions involving the sale and purchase of goods. To evade detection, payments were made against the invoices by cheque or bank transfers and the amounts were later withdrawn from the accounts of hawala operators.
- The CAG relied upon the MSTD data for analysis and found that the Income Tax Department had not even scrutinised all the assesses featuring on the list.

Inflated expenses

- The shell companies are used to generating bogus bills showing inflated expenses on various counts. They receive payments through the banking channel to project the transactions as genuine, and then return the rest to the ultimate beneficiaries after charging a commission. Unscrupulous tax consultants and chartered accounts are also involved in the setting up of such entities.

GS : 2 - HEALTH

India joins WHO call to end TB by 2030 in South East Asian

(The Hindu)

- India among other countries in the South East Asian Region, which bear half of the global tuberculosis burden, today signed a 'call for action' and pledged to scale up measures to end the disease by 2030.
- India reports 2.8 million new TB cases annually and nearly half a million deaths due to the disease.

Key facts:

- Health ministers from countries in WHO South-East Asia Region, which bear half the global TB burden and WHO today signed a 'Call for Action' for ending TB, pledging to scale-up efforts and implement adequately funded, innovative, multi-sectoral and comprehensive measures to achieve the global target to end the disease by 2030.
- Six of the region's countries -- Bangladesh, DPR Korea, India, Indonesia, Myanmar and Thailand -- are among the 30 high TB burden nations globally.
- WHO SEARO said while countries in the region have been making efforts against TB, the annual decline in TB

incidence -- which is currently between 1.5 per cent and 2 per cent -- is "insufficient" and needs to be scaled up to at least 10 per cent to 15 per cent to meet the 'End TB' targets.

- The global targets seek to **reduce TB mortality by 90 per cent** and incidence by 80 per cent by 2030.
- WHO's South-East Asia Region comprises Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste.

MISCELLANEOUS

India hosts world's oldest algae fossil

(The Hindu)

- Indian Scientists have uncovered a pair of 1.6 billion-year-old fossils that appear to contain red algae.
- It may be the oldest plant-like life discovered on Earth.
- Until now, the oldest known red algae was 1.2 billion years old.
- The discovery was published in the journal PLOS Biology.
- The material structurally resembles red algae was found in Chitrakoot region in Uttar Pradesh and Madhya Pradesh.
- It was embedded in fossil mats of cyano bacteria inside a 1.6 billion-year-old phosphorite (a kind of rock).

India ranks 148 in 2017 UN Women in Politics Map

- In recently released 2017 Women in Politics Map report, India was ranked low at 148th position in representation of women in executive government.
- It was released by the Inter-Parliamentary Union (IPU) and UN Women.
- The report was launched on sidelines of 61st Commission on Status of Women, the largest inter-governmental forum on women's rights and gender equality.
- The theme for this year event is on women's economic empowerment in the changing world of work.
- Globally, the number of women in executive government and in Parliament has stagnated, with only marginal improvements since 2015.
- Top 10 countries with highest women in parliament: Rwanda, Bolivia, Cuba, Iceland, Nicaragua, Sweden, Senegal, Mexico, Finland and South Africa.

18th Mar. 2017

GS : 3 - AGRICULTURE

ICRISAT, ICAR join hands for crop improvement

(The Hindu)

Why in news?

- Indian Council of Agricultural Research (ICAR) and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) would work together on crop improvement and agronomy programmes for grain legumes and dryland cereals.

Key points:

- Climate smart crops, smart food and digitisation of breeding database have been identified as some of the core areas of research.
- Other areas of focus over the next three years include - integrating systems modelling tools for upscaling climate resilient agriculture, developing genetic and genomic resources of finger millet and enhancing genetic gains for priority traits.
- Dryland cereals and grain legumes are branded as smart foods - good for consumers, farmers and the planet as they diversify.

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT):

- It is an international organisation which conducts agricultural research for rural development.
- It headquartered in Patancheru (Hyderabad, Telangana, India) with several regional centers (Bamako (Mali), Nairobi (Kenya)) and research stations (Niamey (Niger), Kano (Nigeria), Lilongwe (Malawi), Addis Ababa (Ethiopia), Bulawayo (Zimbabwe)).

- It was founded in 1972 by a consortium of organisations convened by the Ford and the Rockefeller foundations.
- Its charter was signed by the FAO and the UNDP.
- Since its inception, host country India has granted a special status to ICRISAT as a UN Organization operating in the Indian territory making it eligible for special immunities and tax privileges.

Indian Council of Agricultural Research (ICAR)

- The Indian Council of Agricultural Research (ICAR) is an autonomous body responsible for co-ordinating agricultural education and research in India.
- It reports to the Department of Agricultural Research and Education, Ministry of Agriculture.
- The Union Minister of Agriculture serves as its president.
- It is the largest network of agricultural research and education institutes in the world.

GS : 1 - ROLE OF WOMEN (ORGANIZATIONS)

With India at 148th in number of women MPs, UN official moots quotas

(The Hindu)

- India placed at number 148 in world ranking of the number of women parliamentarians in UN Women — the international organisation’s arm for empowering women which called for reservations for women.
- The rankings of all 193 United Nations member countries were released by the Inter-Parliamentary Union (IPU) and UN Women.

Key points:

- In India, women made up 11.8% of the Lok Sabha where 64 were elected to the 542-member house and 11% of the Rajya Sabha with 27 of the 245 members.
- India ranked 88 in the number of women Ministers with five or 18.5% in the cabinet.
- Rwanda ranked first in the number of women parliamentarians with 61.3% in the lower house, followed by Bolivia with 53.1% and Cuba 48.9%.
- Bulgaria, France and Nicaragua tied for the first rank for the number of women ministers with 52.9% each.

UN Women:

- UN Women is the UN entity dedicated to gender equality and the empowerment of women. UN Women was established to accelerate progress on meeting their needs worldwide.
- In July 2010, the United Nations General Assembly **created UN Women, the United Nations Entity for Gender Equality and the Empowerment of Women.**
- In doing so, UN Member States took an historic step in accelerating the Organization’s goals on gender equality and the empowerment of women.
- The creation of UN Women came about as part of the UN reform agenda, bringing together resources and mandates for greater impact.

GS : 3 - ENVIRONMENT (POLLUTION)

CSIR dedicates the first “Pristine air-quality monitoring station at Palampur” to the Nation

(PIB)

- National Physical Laboratory (NPL) has established an atmospheric monitoring station in the campus of Institute of Himalayan Bioresource Technology (IHBT) at Palampur (H.P.) for generating the base data for atmospheric trace species & properties to serve as reference for comparison of polluted atmosphere in India.
- At this station, NPL has installed state of art air monitoring system, greenhouse gas measurement system and Raman Lidar.
- A number of parameters like CO, NO, NO2, NH3, SO2, O3, PM, HC & BC besides CO2 & CH4 are being currently monitored at this station which is also equipped with weather station (AWS) for measurement of weather parameters.
- Council of Scientific & Industrial Research (CSIR) has funded this project under its XII Five Year Plan projects.

Current Scenario:

- In India, air quality parameters are mostly measured in industrial and residential areas, however, data for air

quality of pristine atmosphere is not available in India. NPL's station will contribute to fill this important gap.

- The NPL's station will also serve as a base station for inter-comparison of air quality monitoring equipment being used in India to improve quality of monitored data in India.
- NPL has undertaken activities to contribute in improving the quality of atmospheric monitoring through providing traceable measurement facilities to various stake holders in the country and the NPL 's monitoring station is an important step in that direction. In addition, NPL is also developing calibration standards for different pollutant gases and PM10 samplers for use in atmospheric monitoring.

GS : 1 - INFRASTRUCTURE

World Bank approves \$175 million loan for India's National Hydrology Project

(Indian Express)

- The World Bank has approved \$175 million for India's ambitious National Hydrology Project to improve its ability to forecast floods and reduce vulnerability to recurring floods and droughts.

National Hydrology Project (NHP)

- NHP was approved by the Union cabinet in April 2016 as a central sector scheme with a total outlay of Rs 3679 crore. Later it was approved by the World Bank Board.
- It aims at improving extent, quality, and accessibility of water resources information, decision support system for floods and basin level resource planning and strengthen capacity of institutions in India.
- It is expected to take forward the success of the Hydrology Project-I and Hydrology Project-II by covering the entire country, including the states along the Ganga and Brahmaputra-Barak basins.
- Earlier Project-I and Project-II were limited only to large river systems viz. Krishna and Satluj-Beas.
- They had established real-time flood forecast systems to give reservoir managers an accurate picture of the water situation in their region.
- The early forecast had increased the time available for early flood warnings and improved flood management preparation from hours to days, saving hundreds of lives and avoided flood damages of \$65 million a year.

Comment:

- It will strengthen the capacity of existing institutions to assess the water situation and equip them with real-time flood forecast systems across the country.
- It will help the states monitor all the important aspects of the hydro-meteorological cycle and adopt the procedures laid out in the earlier projects.
- It will help communities to plan in advance to build resilience against flooding and droughts due to uncertainties of climate change.
- It will reduce the vulnerability of many regions to recurring floods and droughts as absence of real-time ground information for the entire country creates difficulties in issuing alerts on time.

MISCELLANEOUS

National Intelligence Grid (NATGRID)

- The NATGRID is a centralised agency which stores sensitive personal information on citizens, from almost two dozen agencies, to be made available for counter terror investigations.
- NATGRID is an ambitious counter terrorism programme, which will utilise technologies like Big Data and analytics to study and analyse the huge amounts of data from various intelligence and enforcement agencies to help track suspected terrorists and prevent terrorist attacks.
- It will connect, in different phases, data providing organisations and users besides developing a legal structure through which information can be accessed by the law enforcement agencies.

National Commission for Safai Karamcharis (NCSK)

- The NCSK was established in 1994 to deal with the grievances of persons engaged in manual scavenging. It has a sanctioned strength of four members and a chairperson.

- It is statutory body established under National Commission for Safai Karamcharis Act, 1993. It aims to promote and safeguard the interests and rights of Safai Karamcharis.
- Its mandate is to study, evaluate and monitor the implementation of various schemes for Safai Karamcharis as an autonomous organisation.

19th Mar. 2017

GS : 2 - INTERNATIONAL RELATIONS

Why is the World Bank keen on resolving Indus divide?

(The Hindu)

- The two nations have had no fresh conflict over the sharing of river waters for more than five decades, differences cropped up after Pakistan opposed the construction of the Kishenganga (330 MW) and Ratle (850 MW) power plants by India on the Jhelum and Chenab in Jammu and Kashmir, over which Pakistan has unrestricted rights under the treaty.

Why did the Bank intervene?

- Even before Partition, the Indus had created problems among the states of British India.
- The problems became international after the creation of two nations as the political boundary was drawn right across the Indus basin.
- The World Bank (then IBRD) helped in 1952 to settle the dispute between the two nations on the sharing of the Indus river basin waters.
- After eight years of hard negotiations, Prime Minister Jawaharlal Nehru and President Ayub Khan signed the IWT in the year 1960.
- **The Bank is also a signatory to the treaty.**
- It sets forth provisions of cooperation between the two countries in their use of the rivers, known as the **Permanent Indus Commission (PIC)**.

Has there been any violation?

- According to the IWT, India has control over three eastern rivers of the Indus basin — **the Beas, the Ravi and the Sutlej** — and Pakistan has control over the three western rivers — **the Indus, the Chenab and the Jhelum**. All six rivers flow from India to Pakistan.
- Among other uses, India is permitted to construct power facilities on these rivers subject to regulations laid down in the treaty.
- India had asked the bank for appointment of a neutral expert following Pakistan's objections to two projects, while Pakistan demanded the formation of a court of arbitration, alleging that India had violated the treaty.
- In December 2016, the Bank announced a 'pause' and asked both parties to resolve the issue amicably by the end of January 2017.

What stand did the Bank take?

- India welcomed the Bank's neutral stand, while Pakistan sought intervention of the Bank after being unable to find an amicable solution to the dispute through the commission.
- Given that India has remained the Bank's single largest borrower since its inception with cumulative borrowings from IBRD and IDA touching \$103 billion, the bank did not perhaps want to upset it.
- With buoyancy in foreign exchange reserves, the Bank needs India more than the other way round and this has created some anxiety in the Bank circles about the future direction of their relationship.

Why is the Bank playing a role again?

- This is because India and Pakistan are important partners and clients of the Bank. In South Asia, Pakistan (\$2,280 million) received the highest lending from the Bank after India (\$3,845 million) during the fiscal 2016. Moreover, there are not too many borrowers with a credible record like India.
- The Bank maintained its aid could be effectively used if both nations kept the peace and ensured better management of the waters, on which lakhs of farmers depend. As both nations have failed to resolve the dispute amicably, the Bank CEO has initiated a dialogue and bank officials are again playing the role of mediator.

GS : 3 - ENVIRONMENT

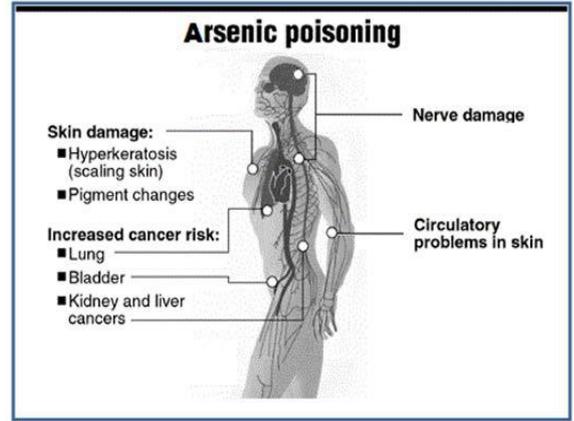
1.04 cr hit by arsenic contamination in Bengal

(The Hindu)

- Following a recent report tabled in the Lok Sabha stating that West Bengal has the highest number of arsenic-affected people in the country.

Key facts:

- Bengal topped the list with more than 1.04 crore arsenic-affected persons.
- Bihar comes second, with Assam in third spot.
- According to the WHO's guidelines for drinking water quality (2011), the permissible limit of Arsenic in groundwater is **.01 mg per litre**.
- However, in India the permissible limit in drinking water has recently been **revised from .05 mg per litre to .01 mg per litre**



MISCELLANEOUS

First fully India-made train Medha flagged off at Dadar station

(The Hindu)

- First fully India-made train (rake) Medha was flagged off at Dadar station
- It has been manufactured by the Integral Coach Factory (ICF) in Chennai, Tamil Nadu
- It has in-built systems to minimise breakdowns during the travel.
- It is fitted with a high power fully Made in India 3-phase propulsion system and powered by Hyderabad-based firm Medha Servo Drives.
- The rake can run at a speed of 110 km ph, whereas local trains run at maximum 90 or 100 km ph.
- It also has LED lighting which reduces energy consumption by approximately 30-35% as compared to the existing rakes.

20th Mar. 2017

GS : 3 - SCIENCE AND TECHNOLOGY

Telescope upgrade to sniff out solar storms

(The Hindu)

- The GRAPES-3 experiment at TIFR's Cosmic Ray Laboratory in Ootacamund is getting upgraded. The telescope last year detected the effect of a solar storm that hit the earth in June 2015.
- The upgrade will play a major role in getting precise information about the propagation of storms in 'the last million miles' (from the L-1 point) of their journey from the Sun to the earth.

Key facts:

- The upgraded detector will have an increased coverage of the sky and improved capacity to determine the direction of incident cosmic rays.
- The latter property, of being able to discern the direction of detected particles, makes it unique among cosmic ray detectors in the world; it can also to measure the intensity of the particles.
- Since the enhanced facility can cover a wider field of view (from present 37% to 57%), the chances of spotting solar storms will be higher.
- The sun is at a distance of 150 million kilometres from the earth, and satellites have been placed at a distance of nearly 1.5 million kilometres, at the so-called L1 point, where they orbit the Sun along with the Earth.
- Since charged particles from a solar storm will first impact the satellites before hitting the earth, they act as an early warning system.
- Depending on the speed of the storm, it will take about 20-40 minutes to reach the earth from the L1 point.

Impact of Solar Storm:

- It is important to know the time when plasma will reach the earth, accurately, so that preventive and protective measures can be put into place in case a solar storm were to strike the earth.

- If the earth's magnetic field were to be weakened by extreme solar storms, charged particles would shower on to the planet.
- Apart from rendering electronic devices defunct, charged particles in an extreme solar storm can also short current carrying over-head high voltage lines, leading to large-scale transformers burn out and thereby, power blackouts.
- A 2008 study conducted by the U.S. National Academy of Sciences estimated that an extreme event could lead to a loss of 40% of transformers in the U.S., which, in turn, could take years to restore.

Prevention:

- The up side is that the way to prevent such a disaster is well understood: simply switch off the power lines on being informed of an approaching solar storm! And for this to be possible, an accurate determination of the time taken for the solar storm to travel to the earth is needed, which is where the GRAPES-3 set up comes in.

GS : 2 - HEALTH

The lowdown on India's plan to eliminate TB by 2025

(The Hindu)

What is it?

- At the end of 50 years of tuberculosis control activities, the disease remains a major health challenge in India.
- As per new estimates, the number of new cases every year has risen to 2.8 million and mortality is put at 4,80,000 each year.
- These figures may go up when the national TB prevalence survey is undertaken in 2017-18.
- Against this backdrop, the Ministry of Health and Family Welfare, in its national strategic plan for tuberculosis elimination (2017-2025), has set a highly ambitious goal of "achieving a rapid decline in burden of TB, morbidity and mortality while working towards elimination of TB by 2025."

How Did It Come About:

- Though the Revised National Tuberculosis Control Programme (RNTCP) has treated 10 million patients, the rate of decline has been slow.
- Providing universal access to early diagnosis and treatment and improving case detection were the main goals of the national strategic plan 2012-17.
- But RNTCP failed on both counts, as the Joint Monitoring Mission report of 2015 pointed out.
- Going by the current rate of decline, India is far from reaching the 2030 Sustainable Development Goals - reducing the number of deaths by 90% and TB incidence by 80% compared with 2015.
- Yet, the latest report for TB elimination calls for reducing TB incidence from 217 per 1,00,000 in 2015 to 142 by 2020 and 44 by 2025 and reduce mortality from 32 to 15 by 2020 and 3 per 1,00,000 by 2025.

Why Does It Matter?

- Radical approaches are needed to come anywhere close to reaching these ambitious targets.
- Most importantly, the TB control programme plans to do away with the strategy of waiting for patients to walk in to get tested and instead engage in detecting more cases, both drug sensitive and drug-resistant.
- The emphasis will be on using highly sensitive diagnostic tests, undertaking universal testing for drug-resistant TB, reaching out to TB patients seeking care from private doctors and targeting people belonging to high-risk populations.
- The other priority is to provide anti- TB treatment - irrespective of where patients seek care from, public or private - and ensure that they complete the treatment. For the first time, the TB control programme talks of having in place patient-friendly systems to provide treatment and social support.
- It seeks to make the daily regimen universal; currently, the thrice weekly regimen is followed by RNTCP, and the daily regimen has been introduced only in five States.
- There will be a rapid scale-up of short-course regimens for drug-resistant TB and drug sensitivity testing guided treatment.
- In 2013, India "achieved complete geographical coverage" for **MDR-TB (multi-drug-resistant tuberculosis)** diagnosis and treatment; 93,000 people with MDR-TB had been diagnosed and put on treatment till 2015.

WHAT NEXT?

- Though Bedaquiline, the drug for people who do not respond to any anti-TB medicine, is provided in six sites in the country, the number of beneficiaries is very small.
- The report envisages a countrywide scale-up of **Bedaquiline and Delamanid**.
- In a marked departure, the report underscores the need to prevent the emergence of TB in susceptible populations. One such segment is those in contact with a recently diagnosed pulmonary TB.
- Incidentally, active-case finding is already a part of the RNTCP programme but rarely implemented.
- It wants to increase active case finding to 100% by 2020. Since RNTCP expenditure has increased by 27% since 2012 and is inadequately funded, the Ministry proposes to increase funding to Rs. 16,500 crore.
- Acknowledging that the business-as-usual approach will not get the Health Ministry anywhere close to the goals, it has earmarked critical components that will be addressed on priority.
- These include sending customised SMSes to improve drug compliance, incentivising private doctors to notify cases and providing free medicines to patients approaching the private sector, facilitating nutritional support to TB patients, including financial support, rewarding States performing well in controlling TB, and using management information systems to monitor all aspects of TB control.
- The ultimate impact of this national strategic plan will be transformational improvements in the end TB efforts of India. It plans to take a "detect- treat-prevent-build approach" in its war against TB.

GS : 3 - INFRASTRUCTURE

India’s longest road tunnel to open for traffic soon

- India’s longest road tunnel built on the Jammu-Srinagar National Highway will open to traffic very soon following successful completion of trial run.

Key facts:

- The tunnel is **9.2 km-long** twin-tube tunnel, which is part of a 286-km-long four-lane project on the highway.
- The tunnel, located at an **elevation of 1200 metres**, will be the first in India to be equipped with world-class “integrated tunnel control system” through which ventilation, fire control, signals, communication and electrical systems will be automatically actuated.
- It will reduce travel time between the two state capitals of Jammu and Srinagar by two-and-a-half hours. The road distance from Chenani and Nashri will now be 10.9 km, instead of the existing 41 km.
- The tunnel, connecting Chenani in Udhampur with Nashri in Ramban district, is being completed at a cost of over Rs. 2500 crore.
- The state-of-the-art tunnel is simultaneously being built from the two ends.
- It will also reduce the existing road distance between two points on the highway from 41 km to 10.9 km.

GS : 3 - SCIENCE AND TECHNOLOGY

Scientists discover five new sub-atomic particles

- Scientists using the world’s largest and most powerful particle accelerator have discovered a new system of five particles all in a single analysis.

Key facts:

- The LHCb experiment is one of seven particle physics detector experiments collecting data at the Large Hadron Collider accelerator at CERN (European Organisation for Nuclear Research).
- The collaboration has announced the measurement of a very rare particle decay and evidence of a new manifestation of matter — antimatter asymmetry, to name just two examples.
- The new particles were found to be in excited states — a particle state that has a higher energy than the absolute minimum configuration (or ground state) — of a particle called Omega-c-zero.
- **Omega-c-zero** is a baryon, a particle with three quarks, containing two “strange” and one “charm” quark.
- Omega-c-zero decays via the strong force into another baryon, called **Xi-c-plus**, (containing a “charm”, a “strange” and an “up” quark) and a **kaon K-**.

- Then the **Xi-c-plus particle** decays in turn into a **proton p, a kaon K- and a pion p+**.
- From the analysis of the trajectories and the energy left in the detector by all the particles in this final configuration, the LHCb collaboration could trace back the initial event — the decay of the Omega-c-zero — and its excited states.
- These particle states are named, according to the standard convention, $O_c(3000)^0$, $O_c(3050)^0$, $O_c(3066)^0$, $O_c(3090)^0$ and $O_c(3119)^0$. The numbers indicate their masses in megaelectronvolts (MeV), as measured by LHCb.
- This discovery will contribute to understanding how the three constituent quarks are bound inside a baryon and also to probing the correlation between quarks, which plays a key role in describing multi-quark states, such as tetraquarks and pentaquarks.

GS : 1 - CULTURE

Reviving Assam’s ancient ink

- By unravelling the science behind Assam’s ancient herbal ink ‘**mahi**’, researchers are planning to recreate the lost techniques of manuscript writing. Their efforts could boost heritage tourism.

Key facts:

- The technique involves extracting ‘mahi’ using cow urine from a cocktail of fruit pulp and tree bark such as haritaki, amla, bibhitakhi or bhomora, mango and jamun — often infused with the blood of eels or catfish. Rust from iron tools or nails was added for an intense black hue.
- ‘Mahi’ was used in early and medieval Assam for writing on ‘sancipat’ (folios made of the bark of the sanci tree) manuscripts. Some folios were gifted by **Kumar Bhaskar Barman**, the then King of Pragjyotishpura (ancient Assam) to Harshavardhana, an emperor who ruled north India from 606 to 647 C.E., a testimony to the period of use.
- The endurance of the ink is proven by the stability of sancipat manuscripts. The key factor for this long-lasting marriage between ‘mahi’ and ‘sancipat’ is the herbal concoction’s resistance to aerial oxidation and fungal attacks.
- One of the reasons for the manuscripts’ stability is the anti-fungal activity of the ink. This is due to its raw materials, including astringent fruits and cow urine, which seems to have a protective effect on cellulosic sancipat against fungal attack in the hot and humid climate of Assam.

21st Mar. 2017

GS : 3 - ECONOMY

Vodafone, Idea merge to create India’s largest, world’s 2nd largest telecom company

(The Hindu)

- Kumar Mangalam Birla-led telecommunications major Idea Cellular has agreed to merge with the Vodafone India, Indian unit of the UK headquartered Vodafone Plc.
- The blockbuster merger will create world’s second largest (after China Mobile) and India’s largest telecom company by overtaking Bharti Airtel Ltd.

Key Facts:

- The merged entity will have almost 400 million customers with 35% customer and 41% revenue market share.
- It will have revenue of Rs. 81,600 crore and an operating profit of Rs. 24,400 crore. Together, Vodafone India and Idea Cellular have debt of Rs. 1.08 trillion.
- The merger is expected to be completed in 2018. The brand strategy for the new firm will be developed in due course.
- Kumar Mangalam Birla will be the chairperson of the merged entity.
- Vodafone will own 45.1% in the combined entity, while Kumar Mangalam Birla and other promoters of Idea Group will own 26% and the rest will be owned by the public.
- The merger will be completed by 2018, subject to approvals from shareholders, creditors, stock exchanges, SEBI, telecom department and Competition Commission of India (CCI).

GS : 3 - SCIENCE AND TECH

Green nod for Neutrino project suspended

(The Hindu)

Why in news?

- The Southern Bench of the National Green Tribunal suspended the Environmental Clearance (EC) granted to the India-based Neutrino Observatory (INO) that was to come up in Theni and asked the project proponent to make a fresh application.
- During the arguments, the Tribunal was informed that the Madhikettan Shola National Park in Idukki district of Kerala was just about 4.9 km from the proposed project site and the Tamil Nadu-Kerala border was just a kilometre away, making it a Category 'A' project.

Key points:

- The MoEF had called it a Category 'B' project, for which an Environment Impact Assessment is not necessary, but the department processed it as an additional measure, a source said.
- However, under the guidelines laid down by the Ministry, any project that falls within 5 km from an inter-State boundary or within a notified national park or a sanctuary has to be considered a Category 'A' project that involves a number of processes before an EC is granted, the source said.
- Since it was near a national park, the INO was also asked to get clearance from the National Board for Wildlife.

Neutrino Observatory (INO) Project:

- The India-based INO Project is a multi-institutional effort aimed at building a world-class underground laboratory with a rock cover of approximately 1200 m for non-accelerator based high energy and nuclear physics research in India.
- When completed, the main magnetised iron calorimeter (ICAL) experiment include the world's most massive magnet, four times larger than the 12,500-tonne magnet in the Compact Muon Solenoid detector at CERN in Geneva, Switzerland.

GS : 3 - ECONOMY

SBI-Mahila bank merger okayed

(The Hindu)

- The three-year-old Bharatiya Mahila Bank will be merged with the State Bank of India (SBI) to expedite the outreach of banking services to women.
- The SBI is already in the process of amalgamating its five associate banks.

Bharatiya Mahila Bank:

- Bharatiya Mahila Bank (BMB) is an Indian financial services banking company based in Mumbai, India.
- It was launched in 2013 on the occasion of the 96th birth anniversary of former Indian Prime Minister Indira Gandhi.
- India is the third country in the world to have a bank especially for women, after Pakistan and Tanzania.
- In the last three years since BMB was established, it has extended loans of Rs 192 crores to women borrowers.

GS : 3 - INTERNATIONAL REPORTS

India ranks 122 in 2017 World Happiness

- India ranked at 122 out of 155 countries in the World Happiness Report 2017 published by the UN Sustainable Development Solutions Network on the eve of International Day of Happiness (20 March).
- The rankings are based factors such as inequality, life expectancy, GDP per capita, public trust (i.e. a lack of corruption in government and business), and social support.
- Together they are used to generate a happiness score of country on a scale from 1 to 10.
- This year it is fifth such report since the first was published in 2012.

Key points:

- Norway is at first place.
- The report mentioned that money is not the only ingredient in the recipe for happiness.
- India was placed behind the majority of South Asian Association for Regional Cooperation (SAARC) nations, apart

from war-ravaged Afghanistan (141).

- Eight SAARC nations: Pakistan (80), Nepal (99), Bhutan (97), Bangladesh (110) and Sri Lanka (120). Maldives did not figure in the report.
- BRICS Countries: Brazil (17), Russia (56), China (79), South Africa (116) and India (122).

GS : 3 - ENVIRONMENT POLLUTION AND DEGRADATION

Uttarakhand HC recognise Ganga and Yamuna Rivers as living entity

(The Hindu)

- The Uttarakhand High Court has recognized the Ganga and Yamuna Rivers as so-called living entities.
- It is for the first time any court in India has recognized a non-human as a living entity.
- Uttarakhand HC verdict Ganga and Yamuna, all their tributaries, streams are declared as legal persons [or] living persons in order to protect the recognition and the faith of society.

Key Points:

- They will have the status of a legal person with all corresponding rights, duties and liabilities of a living person in order to preserve and conserve them. State government failed to fulfil its responsibility regarding the rivers.
- Central government must constitute Ganga Management Board to look into the issue of cleaning and maintaining these rivers.
- The Director, Namami Gange project and the Chief Secretary and the Advocate General of Uttarakhand have been charged to protect, conserve and preserve the rivers and their tributaries.

GS : 2 - GOVERNMENT INITIATIVES

Union Cabinet approves four GST Bills

(PIB)

Why in news?

- The Union Cabinet chaired by PM has approved the four Goods and Services Tax (GST) related bills.
- The passage of these four GST related bills will pave the way for the biggest reform in the area of Indirect Taxes in the history of the country.
- These four Bills are:
 1. **The Central Goods and Services Tax Bill, 2017 (CGST Bill):** It makes provisions for levy and collection of tax on intra-state supply of goods or services for both by the Union Government.
 2. **The Integrated Goods and Services Tax Bill, 2017 (IGST Bill):** It makes provisions for levy and collection of tax on inter-state supply of goods or services or both by the Union Government.
 3. **The Union Territory Goods and Services Tax Bill, 2017 (UTGST Bill):** It makes provisions for levy on collection of tax on intra-UT supply of goods and services in the UTs without legislature. It is akin to States Goods and Services Tax (SGST) that will enacted by state legislatures for levy and collection of tax by the States/UTs on intra-state supply of goods or services or both.
 4. **The Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill):** It provides for compensation to states for loss of revenue arising on account of implementation of the GST for a period of five years as per section 18 of the Constitution (One Hundred and First Amendment) Act, 2016.

MISCELLANEOUS

Thanks to the Afghanistan-Pakistan Transit Trade Agreement (APTTA)

- Thanks to the Afghanistan-Pakistan Transit Trade Agreement (APTTA), Afghanistan can use Pakistan's territory for transit trade while Pakistan's goods can move through Afghanistan to nations bordering Afghanistan.
- However, Islamabad has not agreed to allow using APTTA for goods to be transported from India to Afghanistan through Pakistan's territory (via the Wagah-Attari route).
- India is keen to join APTTA and Afghanistan has backed India's readiness to be an APTTA member but Pakistan has so far rejected such a proposal.

Indian Sign Language Research and Training Centre (ISLRTC)

- The Union Government will soon launch country's first-of-its-kind Indian Sign Language (ISL) dictionary which aims to bring uniformity in sign languages used by hearing and speech impaired people.

- It is being developed in both print and video format by the Indian Sign Language Research and Training Centre (ISLRTC).
- ISLRTC is an autonomous organization under the aegis of Department of Empowerment of Persons with Disabilities (Divyangjan) under the Union Ministry of Social Justice and Empowerment.
- It was established under Society Registration Act, 1860.
- Its main objectives are to develop manpower for teaching and conducting research in Indian Sign Language (ISL), promote use of ISL as an educational mode in collaboration with universities, national and international bodies.

22nd Mar. 2017

GS : 2 - BILATERAL RELATIONS

India, Pakistan to review Miyar project

(The Hindu)

- India and Pakistan has agreed on redesigning the Miyar Hydroelectric project, at the end of two-day talks of Indus Water Commissioners in Islamabad.

Key facts:

- It was also agreed that the **Lower Kalnai** and the **Pakal Dul** projects would be inspected again.
- The talks between the two countries began after 22 months when Pakistan in 2015 skipped consultations following objections on the Kishenganga and the Ratle hydroelectric projects by India.
- Pakistan's request for arbitration on Ratle is still pending with the World Bank, which is the guarantor of the 1960 Indus Water Treaty.

GS : 2 - POLITY

The four words that activists want to be removed from HIV Bill

(The Hindu)

- The long-awaited HIV Bill, a crucial public health legislation guaranteeing equal rights to India's HIV community, was passed by the Rajya Sabha.

Concern:

- India's HIV community confessed itself 'disappointed' as the Bill places an obligation on the State governments to provide treatment "as far as possible", making it weak and open to interpretation.
- "India's HIV community cannot and will not accept this Bill, if the contentious clause 'as far as possible' is not removed.
- This HIV Bill, instead of protecting and safeguarding our welfare is now protecting the government.
- The Health Minister's verbal assurance that no one will be denied treatment is welcoming but this has no constitutional or legal.
- There are approximately 21 lakh persons estimated to be living with HIV in India and the percentage of patients receiving anti-retroviral therapy (ART) treatment currently stands at a mere 25.82% as against the global percentage of 41%, according to the 2015 Global Burden of Diseases (GBD).

Provisions of the bill:

- Under the Bill, central and state governments are obliged to provide for anti-retroviral therapy (ART) and management of opportunistic infections (infections that take advantage of weakness in the immune system and occur frequently). It also prohibits specific acts of discrimination by the state, or any other person, against HIV-positive people, or those living with such people.
- The protection mandated in the Bill extends to the fields of employment, healthcare services, educational services, public facilities, property rights, holding public office, and insurance.
- It also provides for confidentiality of HIV-related information and makes it necessary to get informed consent for undertaking HIV tests, medical treatment and research. The Bill lays down penal provisions for any discrimination practised against a person with HIV/AIDS and breach of confidentiality.
- Additional provisions of the HIV/AIDS Bill, 2014 include that of the role of an ombudsman. According to the provisions of the Bill enlisted in the PRS Legislative Research website, an ombudsman shall be appointed by each state government to inquire into complaints related to the violation of the Act and the provision of health care services. The ombudsman shall submit a report to the state government every six months stating the number

and nature of complaints received, the actions taken and orders passed.

- Provisions related to guardianship are also specified. A person between the age of 12 to 18 years who has sufficient maturity in understanding and managing the affairs of his HIV or AIDS affected family shall be competent to act as a guardian of another sibling below 18 years of age. The guardianship will be apply in matters relating to admission to educational establishments, operating bank accounts, managing property, care and treatment, amongst others.
- Cases relating to HIV positive persons shall be disposed off by the court on a priority basis. In any legal proceeding, if an HIV infected or affected person is a party, the court may pass orders that the proceedings be conducted.
 - a. by suppressing the identity of the person,
 - b. in camera, and
 - c. to restrain any person from publishing information that discloses the identity of the applicant.
- When passing any order with regard to a maintenance application filed by an HIV infected or affected person, the court shall take into account the medical expenses incurred by the applicant.

GS : 3 - ECONOMY

India slips in human development index

(The Hindu)

- India slipped down one **place from 130 to 131** among the 188 countries ranked in terms of human development, says the 2016 Human Development Report (HDR) released by the United Nations Development Programme (UNDP).
- India’s human development index (HDI) value of **0.624** puts it in the “medium human development” category, alongside countries such as Congo, Namibia and Pakistan.

Key facts:

- It is ranked **third** among the SAARC countries, **behind Sri Lanka (73) and the Maldives (105)**, both of which figure in the “high human development” category.
- The world’s top three countries in HDI are Norway (0.949), Australia (0.939) and Switzerland (0.939).
- The HDI is a measure for assessing progress in three basic dimensions of human development:
 - a long and healthy life,
 - access to knowledge, and
 - access to a decent standard of living.
- Noting that women, on an average, have lower HDI than men across the world, the report pointed out that the largest gender disparity in development was in South Asia, where the female HDI value is 20% lower than the male value.
- While India’s HDI value increased from 0.428 in 1990 to 0.624 in 2015, it still had the **lowest rank among BRIC nations**. However, its average annual growth in HDI (1990-2015) was higher than that of other medium HD countries.

Public health spending

- 1.5 billion people worldwide still live in multidimensional poverty, 54% of them concentrated in South Asia. While poverty fell significantly from 1990 to 2015, inequalities sharpened in the region.
- South Asia also had the highest levels of malnutrition in the world, at 38%, and the lowest public health expenditure as a percentage of the GDP (1.6%, 2014).
- India’s **public health expenditure** was even lower, at **1.4% of the GDP**. However, it did make some gains between 1990 and 2015, improving life expectancy by 10.4 years in this period.

GS : 2 - INTERNATIONAL RELATIONS

The 1st Grand Challenges India (GCI) Meeting

(PIB)

- Union Minister for Science & Technology and Earth Sciences has inaugurated the 1st Grand Challenges India (GCI) meeting.
- The meeting is being hosted by the Program Management Unit at BIRAC (PMU-BIRAC) from 21st to 24th March, 2017 and is jointly supported by **Department of Biotechnology (DBT), Government of India, the Bill & Melinda**

Gates Foundation (BMGF) and Welcome Trust.

About GCI

- The Grand Challenges India (GCI) is a mission-directed research initiative, collaboratively **launched in 2012** under the umbrella of Memorandum of Understanding (MoU) between the DBT and BMGF.
- As India transitions from Millennium Development Goals to Sustainable Development Goals, the GCI partnership has ushered a new wave of innovative solutions to help address issues that are inextricably linked to social impact.
- This aims to achieve the said goals by reconnecting Science to People and available scientific data & evidences to the societal problems for finding tangible solutions.
- Programs such as Grand Challenges India are providing global innovators and researchers a fantastic platform to collaborate and progress through the innovation ecosystem by developing their ideas and concepts.
- The PMU- BIRAC manages the complex portfolio of managing grants.
- The GCI provides financial support in the form of grants, cooperative agreements, and contracts to support the advancement of the GCI mission to enhance health, extend healthy lives, and reduce the burdens of poverty.
- The GCI covers all kinds of health and developmental priorities, ranging from maternal and child health, infectious diseases, vaccines, point-of-care diagnostics, agriculture, food and nutrition to other related arenas of developing nations as per individual requirements.
- GCI promotes scientific and technological advances which aim to find solutions to key health and development challenges through research and innovation, by funding Indian researchers. Projects are selected based on national and societal need and transparent calls are made for proposals seeking the best ideas. Under this initiative, the DBT and the Gates Foundation have pledged an investment of up to US\$25 million each, over a period of 5 years.

MISCELLANEOUS

What is Nowruz?

(Indian Express)

- Nowruz, also spelled as Navroz, is the Iranian New Year celebrated by ethnic Iranian people. Several ethnolinguistic communities around the world irrespective of their religious background observe it as the start of the New Year. In India, the Parsi community, who follow Zoroastrianism, celebrate Navroz with full fervour. This year, it falls on March 21.

What are the origins of Navroz? Which communities celebrate Navroz?

- Navroz is the beginning of the New Year for several communities. It dates back as far as the 6th Century BC, back when the Iranian community were homogeneously Zoroastrians. Once the community divided over the course of history, people of Iranian origin worldwide continued following Zoroastrian traditions and with that the Iranian New Year as well.

What is the significance of Navroz?

- Apart from the difference of one or two days, the Iranian community celebrates Navroz on March 21. March 21 is the first day of the Iranian calendar. It is also marked as the day King Jamshid was crowned as the King of Persia. King Jamshid holds a great significance in Zoroastrianism and the day of his coronation is generally considered to be the beginning of the New Year among Iranian people. It is interestingly the first day of the Aries constellation. Navroz is also the day of the Spring equinox and the rituals are performed based on the movements of the sun during the course of the day.

23rd Mar. 2017

GS : 3 - ENVIRONMENT

NABARD launches Water Conservation Campaign

(Business Standard)

- NABARD has announced the launch of a major **Water Conservation Campaign** covering around one lakh villages in vulnerable and water stressed areas of the country during the current year.
- The campaign, launched on the occasion of the World Water Day, would target more specifically areas where the ground water is over exploited.

Key facts:

- The formal launching of the campaign was done in Odisha.
- A similar campaign was undertaken last year covering 40,000 villages in the country. The campaign received encouraging response at field level.
- For the purpose one master trainer and 40 local volunteers (**Jal Dhoots**) will be identified and trained for the campaign.
- The campaign would focus on creating awareness among the rural community about methods of water conservation, preservation and its efficient utilisation at various levels using modern technologies like micro irrigation (more crop per drop), besides traditional water management practices.
- Under the campaign, area specific contents covering different water management practices applicable to local conditions for various agro climatic regions with emphasis on community participation is being developed.

About National Bank for Agriculture and Rural Development (NABARD)

- NABARD is an apex development bank in India. The Union Government holds the majority stake in it.
- **Headquarters:** Mumbai, Maharashtra.
- **Established:** 1982 on the recommendations of **Shivaraman Committee** to implement the National Bank for Agriculture and Rural Development Act, 1981.
- It has been entrusted with matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas in India.
- It is active in developing financial inclusion policy and is a member of the Alliance for Financial Inclusion.
- **Mandate:** Facilitate credit flow for promotion and development of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts.
- Support all other allied economic activities in rural areas, promote integrated and sustainable rural development and secure prosperity of rural areas.

GS : 2 - POLITY

8 tribunals face axe amid downsizing

(The Hindu)

- The Centre has decided to wind up eight tribunals that currently deal exclusively with disputes pertaining to employees' provident fund or EPF, Competition law, Airports' economic regulation, Information Technology law, National highways, railways, copyrights and foreign exchange.
- The Lok Sabha has approved amendments to this effect in the Finance Bill of 2017 proposed by the Centre, along with changes in the norms for tribunals, appellate tribunals and other boards associated with the administration of 17 central laws.

Key facts:

- The major tribunals to be relegated to history include the Competition Appellate Tribunal, whose work will now be transferred to the National Company Law Appellate Tribunal; the Airports Economic Regulatory Authority Appellate Tribunal (AERAAT) and the Cyber Appellate Tribunal — whose functions will now be discharged by the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).
- The EPF Appellate Tribunal's remit would be transferred to the Industrial Tribunal that examines matters under the Industrial Disputes Act of 1947.
- Cases under the Foreign Exchange Management Act of 1999 would be transferred from the dedicated tribunal for foreign exchange matters to the Appellate Tribunal constituted under the Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act of 1976.
- The National Highways Tribunal that deals with disputes under the Control of National Highways (Land and Traffic) Act of 2002 will be wound up.
- **Highway disputes** will now be adjudicated by the **Airport Appellate Tribunal** set up under the Airport Authority of India Act of 1994, which is distinct from AERAAT.
- The **Railways Rates Tribunal** for hearing matters under the Railways Act of 1989 will also cease to exist, with its workload transferred to the **Railway Claims Tribunal** set up under a 1987 law.
- The **Copyright Act of 1957**, decisions under which are currently reviewed by the Copyright Board, will now be transferred to the **Intellectual Property Appellate Board** set up under the **Trademarks Act of 1999**.

GS : 3 - SCIENCE AND TECHNOLOGY

Third largest hypersonic wind tunnel at VSSC

- The Indian Space Research Organisation (ISRO) created history by commissioning the world's **third-largest hypersonic wind tunnel** at the Vikram Sarabhai Space Centre (VSSC) in Thiruvananthapuram.

Key facts:

- In this regard, ISRO chairman commissioned two facilities – **a 1-m Hypersonic Wind Tunnel** and **a 1-m Shock Tunnel**.
- A wind tunnel is used to study the effects of air flowing past a solid object—in ISRO's case, space vehicles. With the space agency lining up big missions like the 'Reusable Launch Vehicle' (RLV), 'Two Stage to Orbit' (TSTO) rockets, air breathing propulsion systems, and the human space flight program for the future, the aerothermodynamic modelling of such vehicles in a hypersonic environment is vital for optimal designs.
- Commissioning of such facilities would provide adequate data for design and development of current and future Space transportation systems in the country.
- The commissioning of the facility also symbolises the country's capability in establishing such world class facilities wherein technology from outside is restricted or not available

The need for wind tunnels and shock tunnels:

- Aerospace vehicles fly at high speed, often greater than the speed of sound. Their re-entry through the atmosphere is at high Mach numbers, the modelling of which is intricate
- Hypersonic Wind Tunnel and Shock Tunnel facilities are used to simulate the aero-thermal environment where characterization of vehicles is carried out. Facilities existing in the country are smaller in size and have limited simulation capabilities
- One meter hypersonic wind tunnel can simulate flow speeds of **Mach 6 to 12**
- One meter shock tunnel simulates flight speed of **4.5 kilometers per second**

GS : 2 - POLITY

Union Cabinet approves amendment to RTE Act, 2009

- The Union Cabinet has approved the amendment to Right of Children to Free and Compulsory Education (RTE) Act, 2009.

Key facts:

- The amendments are aimed at ensuring that all teachers, in position as on 31st March, 2015, acquire the minimum qualifications prescribed by the academic authority to extend the period for such training for four years up to 31st March, 2019.
- This will enable the in-service untrained elementary teachers to complete their training and ensure that all teachers at the elementary level in the country have a certain minimum standard of qualifications.
- This would also ensure that all Teachers would attain minimum qualifications as considered necessary to maintain the standard of teaching quality. This would ultimately result in improvement in overall quality of teachers, teaching processes and consequently learning outcomes of children.
- This will also reinforce the Government's emphasis on improvement of quality of elementary education.

Background

- The RTE Act, 2009 envisages free and compulsory elementary education to every child in the age group of **6-14 years**.
- The section 23(2) of the Act specifies that all teachers at elementary level at commencement of this law if did not possess minimum qualifications under it need to acquire these within a period of five years i.e. by March 2015.
- However, several state governments have reported that 11.00 lakh teachers at the elementary level are still untrained out of a total number of 66.41 lakh teachers.
- Thus, to ensure that all teachers acquire the minimum qualifications prescribed by the academic authority, it is deemed necessary to carry out appropriate amendment in the RTE Act, 2009 to extend period for such training for four years up to March 2019.

GS : 3 - ECONOMY

Cabinet approves of proposal to establish a Fund of Fund for Start-ups (FFS)

- The Union Cabinet has approved the following proposals with regard to the Fund of Funds of Start-ups (FFS) which was established in June, last year with a corpus of Rs. 10,000 crores.

Key facts:

- **Alternate Investment Funds (AIFs)** supported by FFS shall invest at least twice the amount of contribution received from FFS in Start-ups Further, if the amount committed for a Start-up in whole has not been released before a Start-up ceases to be so, the balance funding can continue thereafter.
- It was also decided that operating expenses for carrying out due diligence, legal and technical appraisal, convening meeting of Venture Capital Investment Committee, etc. would be met out of the FFS to the extent of 0.50% of the commitments made to AIFs and outstanding. This will be debited to the fund at the beginning of each half year; i.e. April 1 and October 1.

Background

- The Union Cabinet in its meeting held in the year 2016 had approved the proposal to establish a **Fund of Funds for Start-ups (FFS)** with a total corpus of Rs.10000 crore, with contribution spread over the 14th & 15th Finance Commission cycles based on progress of implementation and availability of funds.
- It was decided that the FFS shall contribute to the corpus of **Alternative Investment Funds (AIFs)** for investing in equity and equity linked instruments of various start-ups at early stage, seed stage and growth stages.
- The FFS is being managed and operated by Small Industries Development Bank of India (SIDBI). FFS contributes to SEBI registered Alternative Investment Funds (AIFs) that may go up to a maximum of 35% of the corpus of the AIF concerned.
- The Cabinet had decided that the corpus of Fund of Funds along with counterpart funds raised by the AIFs in which FFS takes equity would be invested entirely in Start-ups.

Concerns:

- The other issues raised by stakeholders were that the process of funding of Start-ups by AIFs is long drawn which starts from pitching by a Start-up, commitment by the AIF and then release of funds in tranches.
- Thus it is possible that before release of the final instalment the turnover of the Start-up crosses Rs. 25 crores but it still needs funds to meet its growth requirements.
- Besides, Start-ups need access to funds through various stages of their life cycle, viz. early stage, seed stage and growth stage.
- It was also pointed out to the Department by SIDBI that the present provisions don't provide for SIDBI to get compensated for activities done post sanction to AIFs.

MISCELLANEOUS

Assam Government launches SaCReD initiative to make Majuli carbon neutral island

- Assam Government launched Sustainable Action for Climate Resilient Development (SaCReD) Initiative to develop Majuli, the world's largest river island, as the country's first carbon neutral district.
- SaCReD Initiative will also ensure that infrastructure in Majuli has less carbon.
- It aims to battle climate change and reduce greenhouse gas emissions.
- The will also aim to make the Majul island a **biodiversity heritage site (BHS)**, first in the state in order to preserve its rich heritage and legacy.
- State Government also launched registry in Majuli to record and analyse the climate impact of all proposed projects in the district.
- Forests are Lives campaign was also launched to underline the importance of Assam's rich forest and biodiversity. It urges people to take a pledge to conserve its biodiversity to make the state pollution free.

Insolvency and Bankruptcy Board of India (IBBI)

- It is the regulator for overseeing insolvency proceedings and entities like Insolvency Professional Agencies (IPA), Insolvency Professionals (IP) and Information Utilities (IU) in India.

- It was established on 1 October 2016 and given statutory powers through the Insolvency and Bankruptcy Code, which was passed by Lok Sabha on 5 May 2016.
- It covers Individuals, Companies, Limited Liability Partnerships and Partnership firms.
- The new code will speed up the resolution process for stressed assets in the country.
- It attempts to simplify the process of insolvency and bankruptcy proceedings.
- It handles the cases using two tribunals like National Company Law Tribunal (NCLT) and Debt Recovery Tribunal (DRT).

Aarattu Festival

- As mentioned before, the Aarattu Festival is more of a ritual than a festival that is connected to the temple festivals in Kerala.
- At the Shree Padmanabha Swamy Temple in Thiruvananthapuram, this religious rite is observed with much of ceremonial elegance and splendor.
- The Aarattu Festival is celebrated twice each year.

24th Mar. 2017

GS : 3 - ECONOMY

India wants to hasten talks on proposed global services pact

(The Hindu)

- India has pressed for expediting the negotiation process for a global services pact, that among other things, aims to ease norms for movement of skilled workers across borders.
- India had, in February, submitted to the World Trade Organisation (WTO) a legally-vetted proposal for a **Trade Facilitation in Services (TFS) Agreement**. The proposal was taken up by an expert committee at the WTO headquarters in Geneva recently, and it will be considered for discussion by all the WTO members.
- According to India, the proposed pact is **similar to the WTO's Trade Facilitation Agreement (TFA) in Goods**, that recently came into force, and **aims to ease customs norms to boost global goods trade**.

GS : 3 - ECONOMY

NCLT gives nod for Cairn-Vedanta merger

(The Hindu)

- The National Company Law Tribunal (NCLT) has approved the metals and mining firm Vedanta's merger with its cash-rich oil subsidiary Cairn India, paving the way for the formation of the fourth-largest resource company in the world after BHP Billiton, Rio Tinto and Glencore Plc.

About NCLT:

- The NCLT or "Tribunal" is a quasi-judicial authority created under the Companies Act, 2013 to handle corporate civil disputes arising under the Act. It is an entity that has powers and procedures like those vested in a court of law or judge.
- NCLT is obliged to objectively determine facts, decide cases in accordance with the principles of natural justice and draw conclusions from them in the form of orders.
- NCLT was conceptualized by Eradi Committee.
- It is a successor body of the Company Law Board.

Matters dealt by NCLT

- The NCLT has been empowered to exercise the following functions:
 - Most of the powers of the Company Law Board under the Companies Act, 1956.
 - All the powers of BIFR for revival and rehabilitation of the sick industrial companies;
 - Powers of the High Courts in the matters of mergers, de-mergers, amalgamations, winding up, etc.
 - Power to order repayment of deposits accepted by Non-Banking Financial Companies as provided in section 45QA of the Reserve bank of India Act, 1934;
 - Power to wind up companies;
 - Power to review its own orders.

NCLAT:

- NCLAT or “Appellate Tribunal” is an authority provided for dealing with appeals arising out of the decisions of the Tribunal. It is formed for correcting the errors made by the Tribunal. It is an intermediate appellate forum where the appeals lie after order of the Tribunal. The decisions of Appellate Tribunal can further be challenged in the Supreme Court.

GS : 2 - GOVERNANCE

Electoral funding norms for corporates eased

(The Hindu)

- Changes in Electoral funding norms introduced by the government in the amendments to the Finance Bill of 2017 cleared by the Lok Sabha.
- In significant changes in electoral funding norms, corporate donations to **political parties will no longer face any ceiling linked to firms’** profitability and companies will no longer be obliged to inform their shareholders which party’s coffers they contribute to.

Key facts:

- As of now, companies can only contribute up to **7.5% of their average net profits** in the past three financial years to political parties. Moreover, they **are required to disclose the amount** of contributions made and the names of the political parties to which they were made, in their profit and loss accounts.
- The government has included an amendment to the Companies Act of 2013 to **do away with the 7.5%** of net profits limit set on donations and the requirement for a company to disclose the name of political parties to which they donate.
- A clause has also been inserted in the Companies law to make it mandatory for all corporate donations to political parties to be **made by a cheque, electronic means, a bank draft or any other instrument notified by the government.**
- Such an instrument would include **electoral bonds**, announced by Finance Minister in his Budget speech, that are to be **issued by specified banks** to promote cashless modes of donations to political parties. The Centre has also **reduced the maximum limit** for cash donations to parties to **₹2,000 a person.**

GS : 2 - POLITY

New OBC commission to get constitutional status

(The Hindu)

- The Government has approved a proposal to provide constitutional backing to the National Commission for Socially and Educationally Backward Classes (NSEBC).

Key facts:

- It will replace the existing National Commission for Backward Classes (NCBC), created in response to a Supreme Court ruling in 1992; it examines and recommends requests for inclusion and exclusion in the list of Other Backward Classes or OBCs.
- The Union cabinet has approved setting up of a National Commission for Socially and Educationally Backward Classes as a constitutional body by making an amendment to the Constitution, mainly by insertion of **Article 338B.**
- A constitutional amendment requires two-thirds approval of both houses of Parliament and subsequent ratification by 50% of the state assemblies.
- Like the NCBC, the new body too will comprise of a chairperson, a vice-chairperson and three other members.
- The new body is likely to be similar to the National Commission for Scheduled Castes under Article 338 and the National Commission for Scheduled Tribes under Section 338A which were introduced in the Constitution by way of two constitutional amendments in 1990 and 2003.
- In the case of **Indra Sawhney versus Union of India**, the Supreme Court in 1992 found that it was not invalid to identify a group by any criteria like occupation, social, educational or economic situations.
- However, it noted that **social and educationally backward class** under **Article 340** had to be construed in a limited sense and did not have the wide sweep as under the fundamental right guaranteed to backward classes in Article 16(4). This provision empowers the government to make reservations in appointments in favour of “any backward class of citizens.

GS : 2 - POLITY

NCST Approves Proposal for Five Additional Seats for Tribals in Sikkim Assembly

(The Hindu)

- National Commission for Schedule Tribes (NCST) has approved the proposal for five additional seat for tribals in Sikkim assembly.
- At present there are 32 members in Sikkim assembly and it would be increased to 40. Out of the proposed additional eight seats, five seats would be reserved for **Limbu and Tamang tribes**.
- Reserve seats for STs are increased from 12 to 17.

About National Commission for Scheduled Tribes (NCST)

- NCST is constitutional body set up **under Article 338A** added through Constitution (**89th Amendment**) Act, 2003.
- It was **bifurcated from erstwhile National Commission for Scheduled Castes and Scheduled Tribes**.
- The First commission was constituted on 2004 with **Kunwar Singh** as the chairperson.
- **Composition:** Chairperson, a Vice-Chairperson and three full-time Members (including one lady Member). All of them have tenure of **three years** from the date of assumption of charge.
- **Functions:** Investigate and monitor all matters relating to the safeguards provided for the STs under the Constitution or under any other law or under any order of the Government and evaluate the working of such safeguards Inquire into specific complaints with respect to the deprivation of rights and safeguards of STs.
- Participate and advise in planning process of socio-economic development of the STs and to evaluate the progress of their development under the Centre and any State; Present President, annually reports upon the working of those safeguards.
- To make in such reports, recommendations as to measures to be taken by Governments for effective implementation of those safeguards and other measures for the protection, welfare and socio-economic development STs.

MISCELLANEOUS

World Meteorological Day (WMD)

- The World Meteorological Day (WMD) is observed every year on **23rd March** to mark establishment of World Meteorological Organization (WMO) on this day in 1950.
- WMO is an **intergovernmental organization** whose mandate covers weather, climate and water resources. It is **UN specialized agency** for meteorology, operational hydrology and related geophysical sciences.

World Tuberculosis Day (WTD)

- The World Tuberculosis Day (WTD) is observed every year on **March 24** to raise public awareness about the global epidemic of Tuberculosis (TB) and efforts to eliminate the disease.
- WTD is observed to commemorate discovery of Mycobacterium tuberculosis, bacillus (bacteria) causing TB on 24th March, 1882 by German microbiologist Dr Robert Koch.

India ranks 87th on energy architecture performance: WEF

- India has marginally improved its position to **87th place** on a global energy architecture performance index, but ranks among the worst for pollution.
- **Switzerland topped** the annual list released by **Geneva-based World Economic Forum (WEF)** and was followed by **Norway, Sweden, Denmark and France** in the top five. India's rank improved three places from 90th last year.
- Overall, some of the largest consumers of energy such as China (95th), India, Japan (45th), the Russian Federation (48th) and the United States (52nd) have either slipped in the rankings or experienced only marginal gains.
- **Bahrain is ranked the lowest at 127th.**

25th Mar. 2017

GS : 3 - INDIAN ECONOMY

Centre seeks banks' turnaround plans

(The Hindu)

- The Finance Ministry has written to 10 public sector banks making it clear that the lenders would only get further capital infusion once they submit a time-bound turnaround plan.
- The government's move to crack the whip on lenders comes after some banks reported losses in financial year 2015-16 as well as for the nine-month period of the current financial year.
- In its financial stability report, RBI had said banks may remain risk averse in the near future as they clean up their balance sheets and their capital position may remain insufficient to support higher credit growth. According to RBI data, gross non-performing assets of commercial banks increased to 9.1% of their gross advances as of September 2016, from 5.1% a year earlier. Public sector banks share a disproportionate burden of this stress.

Mission Indradhanush:

- In 2015, under the Indradhanush plan, the government had announced capital infusion of ₹70,000 crore in public sector banks for four years, starting from 2015-16. In the first two financial years, ₹25,000 crore had been earmarked per year with ₹10,000 crore to be disbursed in each of the remaining two years. However, credit rating agencies had pointed out that the sum was insufficient as banks needed to meet Basel-III norms as well as make provisions for rising bad loans.

GS : 3 - INFRASTRUCTURE

ICHR to study if Ram Setu is man-made

(The Hindu)

- The Indian Council of Historical Research (ICHR) is set to undertake an archaeological exploration to find out whether the Ram Setu is a natural or man-made phenomenon.
- Also known as Adam's Bridge, Ram Sethu is a stretch of limestone shoals running from Pamban Island near Rameswaram in South India to the Mannar Island near the northern coast of Sri Lanka.

Background:

- It is believed by Hindus that Ram Setu was built by god Ram and his army to reach Ravana's kingdom on that route when they were on their way to rescue Sita.
- When there was a plan to build a Sethu samudram shipping canal project to cut travel time for ships - as they could not cross the shallow Ram Sethu otherwise - both Hindu groups and environmentalists opposed it.

GS : 3 - ECONOMY

Cap on corporate funds for political parties goes

(Business Standard)

- Parliament recently approved the government's proposal to relax conditions for contributions made by corporate entities.

Key points:

- Till now, corporate entities could contribute only 7.5% of average net profit in the past three financial years.
- The ceiling has now been dropped, paving the way for a firm to deploy unlimited capital irrespective of its own financial and operational health.
- It was proposed as part of the amendments to the Finance Bill, 2017, by the government.
- Provisions of the Companies Act will be amended as part of the Finance Bill.
- Also provision in the Companies Act to disclose the names of beneficiary political parties in companies' profit and loss statements is proposed to be removed.
- But, the amount of donation still needs to be disclosed.

Significance:

- The move is aimed to curb unaccounted money flowing into the political system.
- It will enable companies to make donations without any limitations, like it is in case of developed countries.

- Violating the provisions attracts a fine of less than five times the amount contributed.
- And every officer in default is liable to up to six months' imprisonment and a fine of five times of the amount contributed.
- This would also open up new opportunities in crony capitalism. Pressure could be exerted on a company awaiting government clearances, or a loan restructuring from public or cooperative sector financiers
- Union Finance Minister had in the Budget, announced a 90 per cent cut in the limit for cash donations to Rs 2,000 from Rs 20,000 earlier.
- Political parties would now have to disclose the identity of the donor in case of any donation above Rs 2,000 in cash.
- Through the Finance Bill, the government also announced the concept of electoral bonds, where a donor could purchase bonds from authorised banks against cheque and digital payments only.
- These will be redeemable only in the designated account of a registered political party.

GS : 2 - GOVERNANCE

Aadhaar Made Mandatory For Mobile

(The Hindu)

- The Department of Telecommunications issued a notification on 24th March, 2017, directing all phone service providers to re-verify details for all existing subscribers through Aadhaar-based e-KYC (Know Your Customer) process.
- The move follows a Supreme Court order in February 2017, in which the SC had approved the government's plan to record the identification details of mobile subscribers through an e-KYC mechanism linked to Aadhaar.
- The move will impact more than 100 crore mobile phone subscribers in the country, 90% of whom are prepaid card users.
- Telcos have been directed by the government to intimate their existing subscribers about the Aadhaar-based eKYC re-verification process through all means possible, including through text messages.

Background:

- Notifications have been issued to make Aadhaar compulsory for getting subsidised grains under the Food Security Act, jobs under the MGNREGA and pension benefits under the Employees' Pension Scheme.
- Aadhaar was made mandatory for individuals to apply for a PAN card and for filing income tax returns from July 1, 2017.
- The Centre also made it mandatory for beneficiaries to quote their Aadhaar number to avail benefits under the Pradhan Mantri Kaushal Vikas Yojana, and the Self Employment Scheme for Rehabilitation of Manual Scavengers.

26th Mar. 2017

GS : 3 - ENVIRONMENT

Earth hour

- As part of efforts to spread the message of energy conservation, Delhi will join a billion people across the globe to observe 'Earth Hour' on March 25.
- An unprecedented 187 countries and territories came together for WWF's Earth Hour on Saturday 25 March to take a stand for climate action.
- This year's event marked the **tenth anniversary** of the Earth Hour movement, which started as a one-city event in **Sydney in 2007**, and comes at a time when the need for climate action is greater than ever.
- **2016 was the hottest year** on record and ambitious action is needed by governments, companies and people, their biggest stakeholders, to meet the targets set in the landmark Paris Agreement that entered into force in November last year.

About Earth Hour:

- Earth Hour is an annual international event organised by the **World Wide Fund** for Nature. The event encourages households and businesses to turn off their lights and electrical appliances for one hour at the appointed time to raise awareness about the need to take action on climate change.

GS : 3 - SCIENCE AND TECHNOLOGY

‘National Conference on Down Syndrome’

- Minister for Social Justice and Empowerment inaugurated a “National Conference on Down Syndrome” recently.
- The Conference was organized by The National Trust for the welfare of persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities under M/o SJ&E in collaboration with Muskaan, a registered organisation of the National Trust.

About Down Syndrome:

- Down Syndrome is a chromosomal condition associated with intellectual and learning disabilities.
- Delayed development and behavioural problems are often reported in children with Down Syndrome.
- Persons with Down Syndrome **have 47 chromosomes as compared to 46** in majority of people. Down syndrome occurs when an individual has a **full or partial extra copy of chromosome 21**.
- This one Extra chromosome causes its own impact and slows down learning process.
- It impacts neurological functioning causing impairment of intellectual functions e.g. analytical thinking, complex abstractions and judgement etc. Good schooling, loving family, learning and work opportunities make them grow up to be responsible, loving and cheerful persons.
- Their emotions and needs are like any other person of the same age.
- Accepting and respecting family/community is a big support to their growth and development.

GS : 2 - IMPORTANT INTERNATIONAL INSTITUTIONS

India Signs Financing Agreement with World Bank

- A financing agreement for IDA credit of US\$ 100 (equivalent) for the "Uttarakhand Health Systems Development Project" was signed with the World Bank recently.
- The Financing Agreement was signed between Government of India and the World Bank. A Project Agreement was also signed between Government of Uttarakhand and the World Bank.

Key facts:

- The objective of the project is to improve access to quality health services, **particularly in the hilly districts of the State**, and to expand health financial risk protection for residents of the State.
- The project will benefit the residents of **hilly districts in particular**.
- The project has two main components,
 - (i) Innovations of engaging the private sector; and
 - (ii) Stewardship and system improvement.
- Out of the total project size of USD 125 million, USD 25 million will be the counterpart contribution of the State Government.
- The planned design of the Project consists of multiple self-contained clusters of clinical services managed by operators on a **PPP basis**, providing services for free or at nominal charges, backed up by a robust oversight and monitoring mechanism fully integrated with the expanded health insurance program in the State. This will be concurrent with strengthening the state’s capacity to implement the project.
- The closing date of Uttarakhand Health Systems Development Project is 30th September, 2023.

GS : 3 - SCIENCE AND TECHNOLOGY

Let there be light: Germans switch on 'largest artificial sun'

(The Guardian)

- German scientists are switching on “**the world’s largest artificial sun**” in the hope that intense light sources can be used to generate climate-friendly fuel.

Key facts:

- The Synlight experiment in Jülich, about 19 miles west of Cologne, consists 149 souped-up film projector spotlights and produces light about 10,000 times the intensity of natural sunlight on Earth.
- When all the lamps are swivelled to concentrate light on a single spot, the instrument can generate temperatures

of around 3,500C – around two to three times the temperature of a blast furnace.

- The aim of the experiment is to come up with the optimal setup for concentrating natural sunlight to power a reaction to produce hydrogen fuel.

How will it work?

- Solar power stations that use mirrors to focus sunlight onto water are already well established. These work by harnessing heat from the sun to produce steam that turns turbines and generates electricity.

Significance:

- The Synlight experiment is investigating the possibility that a similar setup could be used to power a reaction to **extract hydrogen from water vapour**, which could then be used as a **fuel source for aeroplanes and cars**.
- Synlight currently uses a vast amount of energy – four hours of operation consumes as much electricity as a four-person household in a year – but scientists hope that in the future natural sunlight could be used to **produce hydrogen in a carbon-neutral way**.

GS : 3 - ECONOMY

FM approves the re-organisation of the field formations of the Central Board of Excise & Customs (CBEC) for the implementation of Goods & Services Tax (GST) (PIB)

- Reorganisation of the field formations of the Central Board of Excise & Customs (CBEC) for the implementation of Goods & Services Tax (GST) has been approved by the Union Finance Minister.

Key facts:

- The existing formations of Central Excise & Service Tax under the CBEC have been re-organised to implement and enforce the provisions of the proposed Goods & Services Tax Laws.
- The Central Board of Excise & Customs (CBEC) is being renamed as the **Central Board of Indirect Taxes & Customs (CBIC)**, after getting legislative approval.
- The proposed CBIC shall, inter alia, supervise the work of all its field formations and Directorates and assist the Government in policy making in relation to GST, continuing Central Excise levy & Customs functions.
- The CBIC will have 21 Zones, 101 GST Tax payer Services Commissionerates comprising 15 sub-Commissionerates, 768 Divisions, 3969 Ranges, 49 Audit Commissionerates and 50 Appeals Commissionerates. This will ensure rendering of taxpayer services to all the taxpayers through an indirect tax administration structure, having pan-India presence.

GS : 3 - DEFENCE

Government approves Shekatkar Committee recommendations to reform military

- The government has approved a host of reforms in the military, with proposals to cut flab and improve financial management.

Key facts:

- If the proposal to reduce deployment of active-duty soldiers in avoidable postings were to be implemented, retired officers and jawans will replace serving personnel in the running of the National Cadet Corps (NCC).
- The government has approved most of the proposals of a committee of experts, **headed by Lt. Gen. D.B. Shekatkar (Retd), constituted by the Defence Ministry**.
- The committee, **set up in 2015** to recommend measures to enhance combat capability and rebalance defence expenditure of the armed forces.
- The committee has said that if its recommendations are implemented over the next five years, the government can save up to ₹ 25,000 crore from the current expenditure.
- Most of the recommendations are measures to cut down flab in the Army to make it lean and agile and increase coordination among the three Services.

Major recommendations:

- The committee has recommended a **performance audit** of the role of non-combat organisations under the Defence Ministry.

- The organisations include those dealing with defence estates and accounts, the Director- General of Quality Assurance, the Ordnance Factory Board, the Defence Research and Development Organisation and the NCC.
- The committee has suggested downsizing or rationalisation of manpower in these organisations, which can lead to significant savings. Another recommendation is the setting up of a joint services war college for training middle-level officers.
- Comprehensive reforms in the running of NCC could be rolled out over the next few years. Progressively, the NCC could be run by re-employed or on-contract ex-service personnel. It is not clear if the NCC will be transferred out of the Defence Ministry to the HRD Ministry, as recommended by the committee.

27th Mar. 2017

GS : 3 - SCIENCE AND TECHNOLOGY

Most massive brown dwarf discovered 750 light years away

(Livemint)

- Scientists have identified a record breaking **brown dwarf** with the ‘**purest**’ composition that is about **90 times as massive as Jupiter**, located **750 light years away** in the outermost reaches of our galaxy.

Key facts:

- Brown dwarfs are **intermediate between planets and fully-fledged stars**.
- Their mass is too small for full nuclear fusion of hydrogen to helium (with a consequent release of energy) to take place, but they are usually significantly more massive than planets.
- The object, known as **SDSS J0104+1535**, is located 750 light years away in the **constellation of Pisces**, SDSS J0104+1535 is **made of gas** that is around **250 times purer than the Sun**, so consists of more than **99.99% hydrogen and helium**.
- Estimated to have formed about 10 billion years ago, measurements also suggest it has a mass equivalent to 90 times that of Jupiter, making it the **most massive brown dwarf found to date**.
- SDSS J0104+1535 has been classified as an **L type ultra-subdwarf** using its optical and near-infrared spectrum, measured using the **European Southern Observatory’s Very Large Telescope (VLT)**.

GS : 1 - HISTORY

Titu Mir returns to roil Bengal, 190 years after his fall in war

- Nearly 190 years after his death, **Syed Mir Nisar Ali, or Titu Mir**, a **peasant leader**, who led **the Narkelberia Uprising in 1831** — often considered the **first armed peasant uprising** against the British — has made a controversial comeback in Bengal’s politics through a chapter in a prescribed tenth grade history textbook.

What is the controversy?

- Celebrated in folklore as a peasant leader, Titu Mir remains a controversial political figure in Bengal for his religious identity as an Islamic preacher after he **converted to Wahabism**.
- The current row has been sparked by the chapter in the textbook, approved by the West Bengal Board of Secondary Education, that **claims Titu Mir “killed” many Hindus and destroyed several temples**.
- The chapter further says that the Wahhabi movement “completely collapsed” following Titu’s death.

Titu Mir Movement:

- Titu Mir (1782-1831) a peasant leader who resisted the oppression of the local zamindars and European indigo planters on the peasantry with ultimate object of liberating the country from British domination.
- He was a leader of the **tariqah-i-muhammadiya** in Bengal, and his movement initially aimed at socio-religious reforms, elimination of the practice of **shirk (pantheism)** and **bidat (innovation)** in the Muslim society and at inspiring the Muslims to follow Islamic principles in their day to day life.
- Titu Mir built a **strong fort with bamboo poles at Narkelbaria** in October 1831, recruited mujahids and gave them military training.
- Titu Mir adopted Wahhabism, and advocated Sharia laws, bypassing the “tradition of folkish Islam in Bengal.
- Titu Mir led the Narkelberia Uprising in 1831 — often considered the first armed peasant uprising against the British.
- A large British force was sent by Governor General William Bentinck to Narkelberia which laid seige to Titu’s

bamboo fortress on November 18, 1831. The assault began on the morning of November 19 and continued for three hours.

- Finally the fortress fell and Titu was bayoneted to death; 50 of his comrades were killed. At least 800 of Titu's soldiers were captured and 140 were sent to prison.
- **Mir Nisar Ali** Popularly known as Titu Mir was an ardent follower of **Syed Ahmad of Rae Bareli**.
- He preached fundamentalist doctrine of Islam, mobilized Muslim peasants to organize a rebellion against government, which was ruthlessly crushed.

WHO IS A WAHABI

- One who follows the Islamic philosophy, enunciated by Muhammad bin Abdul Wahab Najdi [1703-1792] in Arabia, to practice Islam in all its purity, as did Prophet Mohammed, is a Wahabbi.

Wahabi Movement:

- Shah Waliullah was first Indian Muslim leader who expressed concern at degeneration that has set among the Indian Muslims.
- Syed Ahmad of Rae Bareli (1786-1831), a disciple of Shah Abdul Aziz, eldest son of Waliullah popularized the teachings of the latter and also gave it political colour.
- Slogan to return to pure Islam.
- Jihad was declared with the prime objective of converting **Dar-ul-Harb (land of infidels)** into **Dar-ul-Islam (land of Islam)**.
- Syed Ahmad of Rae Bareli became sworn enemy of British.
- He established permanent center at Patna and started movement of religious reform and initiated campaign with the help of frontier tribes. However, he had to face Sikh power on the north-west. Syed Ahmad of Rae Bareli lost his life in a **battle at Balakot**.
- Wahabi's considered Sher Ali the assassinator of Lord Mayo a martyr.

GS : 3 - SCIENCE AND TECHNOLOGY

ISRO Joins 36th Indian Scientific Expedition to Antarctica

- The National Centre for Antarctic and Ocean Research (NCAOR), **Ministry of Earth Sciences**, Government of India, organises the Indian Scientific Mission to Antarctica every year and ISRO has been participating for a long time.
- This is the 36th Indian scientific expedition to Antarctica.

Key facts:

- The main objective of this expedition is to install stakes on ice for **Differential Global Positioning System (DGPS)** measurements around two Indian bases **Bharati and Maitri** in Antarctica.
- It will validate glacier surface velocity derived from satellite data to estimate thickness of snow over land and sea ice using Ground Penetrating Radars (GPR's). It will also verify conditions of snow over sea and land ice.
- Apart from collecting field data, the team at SAC also monitored sea ice status near Bharati and Maitri coasts of Antarctica using real time satellite data from newly launched **SCATSAT-1** and other satellites, for accurate navigation of expedition ship.
- Measurements of Atmospheric **Black Carbon (BC)**, GHGs and solar radiation fluxes at Antarctica on a long-term basis: The objectives of the project are to generate base line concentrations of atmospheric constituents such as CO₂, CH₄, H₂O, which are being measured by ultra portable Greenhouse Gas Analyser/Licor CO₂ analyser.
- BC measurement for long-range transport from populated mid and low latitude regions and its presence over pristine Antarctic environments is being measured using **Aethalimeter-AE31**. Microtops sun photometer is used to measure Columnar Aerosol Optical depth (AOD), Water vapour and Ozone.
- Study on long term precipitation over Antarctica using surface and space-based measurements: The rate of atmospheric precipitation over Antarctica may have important role to global sea level variation via impact on the surface snow and ice accumulation.
- The objective of the project is to understand the inter-annual variability of precipitation by direct measurements of Antarctic precipitation features such as the frequency, the phase, and the snowfall rate and also validation of

Cloud Sat satellite data retrievals of precipitation over Antarctica.

MISCELLANEOUS

India to redefine blindness to meet WHO stipulation

(The Hindu)

- The government is set to change a four-decade-old definition of blindness to bring it in line with the WHO criteria and ensure the Indian data on blindness meets the global estimates.
- As defined under the National Programme for Control of Blindness (NPCB), **a person unable to count fingers from a distance of six metres is categorised as “blind” in India, against the WHO’s stipulation of three metres.**
- India will bring the definition of blindness at par with the WHO’s criteria.

President of India inaugurates ‘World Conference on Environment’

- The President of India has inaugurated the ‘World Conference on Environment’ in New Delhi (March 25, 2017).
- It is the **third** World Conference on Environment organized **by the National Green Tribunal (NGT)**

28th Mar. 2017

GS : 3 - SCIENCE AND TECH (DEFENCE)

Navy bids farewell to long range maritime patrol aircraft

(The Hindu)

- After close to three decades and 30,000 hours of accident-free flying to play a crucial role during major Naval operations, TU-142M long range maritime patrol aircraft will be de-inducted on 29 March 2017 at INS Rajali naval air station in Arakkonam.
- Inducted from the erstwhile USSR in 1988, it has been the mainstay of long range maritime reconnaissance and anti-submarine warfare operations of the Indian Navy.

Key points:

- The aircraft had been part of all major exercises and operations including Operation "Cactus" in Maldives, Operation Vijay in 1998, Operation Parakram in 2002 and anti-piracy operations from 2011 to till date.
- With its four powerful engines, contra-rotating, slender fuselage and swept wings, TU-142M aircraft is the fastest turboprop aircraft in the world.
- Its role will be taken on by the newly inducted Boeing P-8I aircraft.

GS : 2 - POLITY (BILL AND AMENDMENTS)

Suicide no more a crime (Mental health bill-2016)

(Indian Express)

Why in news?

- The Mental Healthcare Bill, which decriminalises suicide and guarantees the right to better healthcare for people with mental illness, was unanimously passed in the Lok Sabha on 27 March 2017.
- The Bill mandates that a person who is attempting suicide shall be presumed to be suffering from "severe stress" and, therefore, shall not be tried or punished by law.

Key points:

- The new Bill mandates that persons with suicidal tendencies be provided help and rehabilitated.
- This is the first mental health law to take a "rights based" approach to mental illness by consolidating and safeguarding the fundamental human rights of the patients.
- The Bill clearly defines mental illness adding that the earlier definition, under Mental Health Act 1987 was vague.
- A unique feature of the Bill is that it allows adults to make an advance directive on how they wish to be treated in case they got mental illness in the future.
- Such a person can chose a nominative representative who would take care of him or her, the Minister said.
- The Bill also promises free treatment for such persons if they are homeless or fall below the poverty line, even if they do not possess a BPL card.
- Prohibits electro-convulsive therapy: It will be not used for minors. It will be allowed only with the use of anaesthesia.

GS : 2 - GOVERNMENT INITIATIVES

Naidu launches Online Film Certification System

(The Hindu)

- Information and Broadcasting Minister launched the Online Film Certification System of the Central Board of Film Certification (CBFC).
- He said the initiative was on the lines of Prime Minister's vision of ease-of-doing business and digital India, making the entire process transparent and efficient.
- Its objective is to eliminate the need for human interface to the extent possible and enable good governance by automating film certification process.

Key points:

- The system will show status of each application online in the dashboard of the producer and concerned CBFC official.
- Producers of short films/promos/trailers less than 10 minutes can submit their creations online for examination purposes without need to visit CBFC Office/Theatre.
- In case of films longer than 10 minutes, the producer/applicant will only have to show the film at the Examining theatre.
- He will not have to visit the CBFC Offices at all except to collect their certificates.
- The producer/applicant will be informed status of their application by SMS/e-mail.
- It will be an important step in making the CBFC office paperless and will enable effective monitoring and real-time progress tracking for both the CBFC officials and the applicants.

GS : 3 - GEOGRAPHY

Cyclone Debbie makes Landfall in Australia's Northeast Coast

(Indian Express)

- A powerful cyclone dubbed as Debbie has made landfall in Queensland, north-eastern Australia.
- Cyclone Debbie, a category four storm is expected cross the north-eastern Australia coast between Bowen and Airlie Beach.
- It cyclone is Queensland's most damaging since 2011.
- It has left at least 45,000 homes without power and damaged buildings.
- More than 25,000 people were evacuated from their homes ahead of predictions of cyclone.

GS : 2 - POLITY

BS-III fuel vehicles will not become redundant: Centre

(The Hindu)

- The Centre told the Supreme Court that the 19 crore vehicles running on BS-III fuel will not become redundant with the government's upgradation to BS-IV fuel.
- The Bharat Stage IV (BS-IV) emission norms are scheduled to come into force from April 1, 2017.
- The court is monitoring alarming increase in air pollution levels in the National Capital and satellite regions.

Key points:

- The court was hearing pleas by automobile manufacturers seeking clarity on the future of their stockpile of 8.2 lakh BS-III vehicles.
- The court had earlier asked automobile companies not to frustrate the government's initiative to check increasing levels of pollution by selling BS-III vehicles.
- The amicus curiae, assisting the court in the matter, urged the Bench to ban manufacture and sale of BS-III vehicles as the Centre had spent around Rs. 18,000 to 20,000 crore for producing cleaner fuel.
- The manufacturers told the court that they were allowed to sell their stocks with old emission norms when new technology was brought in force on the previous two occasions at the time the industry had switched to BS-II and BS-III in 2005 and 2010.

29th Mar. 2017

GS : 3 - ECONOMY

SBI launches Unnati Credit Card to spread credit inclusion

(The Hindu)

- SBI Card, subsidiary of India's largest lender SBI has launched the Unnati Credit Card to spread credit inclusion among masses.
- The card targeted at all SBI customers, including the Jan Dhan Yojana account-holders across the country.
- It also aims to target new users of credit cards, those who do not have a credit history.

Key points:

- Any SBI customer having balance of at least Rs 25,000 in the savings account is eligible for the Unnati credit card.
- SBI Card is joint venture between the State Bank of India (SBI) and GE Capital, the financial services arm of the US-based General Electric (GE).
- It was incorporated as SBI Cards and Payment Services Private Limited, SBI Card in October 1998. It is headquartered in Gurugram, Haryana.

GS : 2 - INTERNATIONAL

International Rights Intervention In Sri Lanka

(The Hindu)

Why in news?

- Recently, the UN Human Rights Council (UNHRC) unanimously gave Sri Lanka two years' extension to implement the September 2015 resolution on ethnic reconciliation and accountability for alleged war crimes.

Key points:

- The new resolution requests the government to fully implement the measures identified in the resolution of 2015.
- UN rights council had called for international judges to help investigate possible war crimes to guarantee impartiality.
- However, Sri Lankan govt has resisted the call by UN Human Rights chief to set up an international hybrid court.
- Furthermore, the rights of women, fisherfolk, workers, oppressed castes and the northern Muslims seldom figure in popular human rights narratives.

2015 UNHRC Resolution:

- The September 2015 signalled a departure from the Council's earlier antagonistic stand, with Sri Lanka itself co-sponsoring the resolution to address war-time accountability.
- The resolution calls for wide-ranging reforms and a domestic accountability mechanism with international involvement.
- It wanted Colombo to establish a credible judicial process, with the participation of Commonwealth and other foreign judges, defence lawyers and authorised prosecutors and investigators, to go into the alleged rights abuses.
- The Office of the U.N. High Commissioner for Human Rights (OHCHR) will continue to assess the progress in the implementation of its recommendations and other processes related to reconciliation, accountability and human rights.
- The OHCHR is to present a comprehensive report at the 34th session (March 2017).
- While the government rightly claims that the constitutional political solution is the priority over war-time accountability, it has done little to take forward that constitutional process over the past year.

GS : 1 - GEOGRAPHICAL PHENOMENON

India's temperature rose by 0.60 degree over last 110 years

(The Hindu)

Why in news?

- According to the Indian Meteorological Department (IMD), in line with rising temperatures across the globe, all India mean temperatures have risen nearly 0.60 degree Celsius over the last 110 years.
- Further IMD studies have highlighted that extreme events like heat waves have risen in the last 30 years.

Key points:

- As per the fifth Assessment Report (AR5) of Intergovernmental Panel on Climate Change (IPCC) published in 2014, globally averaged combined land and ocean surface temperature has risen by 0.85 degree Celsius over the period 1880 to 2012.
- Many extreme weather and climate events like heat waves, heavy precipitation and tropical cyclones have been observed since about 1950.

Governments initiatives:

- The government has launched the National Action Plan on Climate Change (NAPCC) in June, 2008 to deal with climate change and related issues.
- NAPCC comprises of eight missions in specific areas of solar energy, enhanced energy efficiency, habitat, water, sustaining Himalayan ecosystems, forestry, agriculture and strategic knowledge for climate change.
- These missions address the issues relating to mitigation of greenhouse gases and adaptation to the adverse impacts of climate change on environment, forests, habitat, water resources and agriculture.
- All states and UTs have also been requested to prepare State Action Plan on Climate Change (SAPCC) in line with the objectives of the NAPCC highlighting state-specific issues relating to climate change. So far, 32 states and UTs have prepared their SAPCC.

GS : 2 - GOVERNMENT INITIATIVES

Petroleum Minister launches MoPNG e Seva

(PIB)

- Minister of State (I/C) for Petroleum and Natural Gas launched MoP&NG e-Seva, a dedicated grievances redressal platform on Social Media for all queries and grievances relating to Oil and Gas Sector.
- The MOPNG e-Seva is an integrated grievances redressal platform across social media for all Oil & Gas related service issues.

Key points:

- This portal will be a single point interface for all customers to reach out to the government for addressing their feedback or grievances related to Oil & Gas Sector on social media.
- MOPNG e-Seva will also deliver 24 x 7 support for consumers.
- The e-Seva portal will serve as a single point for queries on Twitter and Facebook to begin with; and other social media platforms in due course.
- A team of Nodal Officers from Oil Companies and Allied Services have been formed to address issues on real-time basis.
- Conversations are being tracked on real-time basis and a standard operating procedure has been put into place for immediate intervention and closure by concerned officials of Companies under the Ministry of Petroleum & Natural Gas.

MISCELLANEOUS

India becomes third largest aviation market globally

- As per latest report by the Sydney-based aviation think-tank Centre for Asia Pacific Aviation (CAPA), India has become the third largest aviation market globally in terms of domestic passenger traffic.
- The report stated that India’s domestic air passenger traffic at 100 million in 2016 has overtaken that of Japan (97 million) to bag the third spot.
- Now India is behind US (719 million) and China (436 million).

Karnataka Bank launches Money Plant RuPay International Platinum Debit Card

- The Karnataka Bank has launched Money Plant RuPay International Platinum Debit Card to provide more privileges to its premium & High net worth individual (HNI) customers.
- This card can be used for domestic as well as international cash withdrawal and purchase transactions.
- It has superior features and privileges such as enhanced withdrawal limits, Personal Accident Insurance Coverage of Rs. 2 lakh, Two Free lounge access per quarter across 300+ airports worldwide and 30+ airports in India, Fuel surcharge waiver, Utility bill cash back offers & various other merchant offers.

US Senate votes to approve Montenegro as NATO's

- US Senate has voted overwhelmingly to approve Montenegro as 29th member of NATO (North Atlantic Treaty Organization) by 97-2 vote.
- The NATO is an intergovernmental military alliance based on the North Atlantic Treaty signed in April 1949.
- It consists of 28 independent member countries across North America and Europe.
- It is based on a system of collective defence whereby its member states agree to mutual defence in response to an attack by any external party. NATO's headquarters are located in Brussels, Belgium.
- The combined military spending of all NATO members constitutes over 70% of the global defence spending.

30th Mar. 2017

GS : 3 - SECURITY

A Chinese city announces stiff punishment for VPN users

(Indian Express)

- Southwest China's **Chongqing Municipality** announced a new regulation to punish unauthorised Internet connections outside China's infamous Great Firewall (GF) using **virtual private networks (VPNs)** by individuals in the region, which censors and criminalises sensitive material online.

Key Facts:

- The regulation, which was issued to "strengthen China's rule of law and cyberspace security. If an individual accesses international network privately or via "illegal channels," or offers related services without authorisation, they could be fined.
- Those who violate the regulation to make profits would be fined and their gains confiscated accordingly.
- Earlier reports said a similar move is being planned all over China. The regulation is regarded significant as VPNs are required in China to access the world wide web.

Great Firewall (GF):

- The GF is built over the years by China **to regulate the Internet content and restrict access to all the banned contents** including access to global social media sites like Twitter, Facebook, Youtube and Google.
- While VPNs are used widely by diplomatic and foreign media in China to access world wide Internet, the special applications designed to beat the GF being marketed by several Internet firms abroad are becoming popular among Chinese too.

GS : 2 - POLITY

FSSAI performance comes under CAG scanner

(Livemint)

- In a first, the Comptroller and Auditor General of India (CAG) is doing a comprehensive performance audit of the country's food regulator.
- CAG's audit is looking at issues such as how FSSAI fixes standards, finalizes regulations, approves products, ensures compliance and conducts surveillance.

Key facts:

- Not just FSSAI, the audit includes the food safety offices of the states.
- This is a fairly comprehensive audit and is being done for the first time since the regulator came into existence.
- Performance auditing is focused on improving good performance in public administration by examining whether public programmes and services achieve the principles of economy, efficiency and effectiveness and identifying conditions or practices that hamper performance and enable the auditor to make suitable recommendations.

About FSSAI:

- FSSAI was set up in August **2011** under the **Food Safety and Standard Act, 2006**.
- It has powers to lay down standards for food articles and to regulate their manufacturing, storage, distribution, sale and import. Some of its activities include licencing and surveillance of food and beverages outlets, enforcement of safety regulations across registered food vendors and ensuring safety of imported food items, their standards and labelling.

GS : 3 - ENVIRONMENT

IMD trains states to deal with heatwaves as temperatures rise

(Livemint)

- Anticipating a structural shift in the country's weather, the India **Meteorological Department (IMD)** is training state governments to improve their mitigation preparedness **to cope with the persistent heatwaves**.

Key facts:

- IMD has tied up with **state disaster management commissioners** and **health secretaries** to formulate plans in the face of large casualties from heatwave conditions.
- The **National Disaster Management Authority (NDMA)**, on its part, has prepared a standard operating procedure template and a sequence of actions to be triggered during a severe heatwave.
- Temperatures across India have been rising on an average of 0.7 degrees every decade, with 2016 the hottest so far.

Heatwaves:

- Heatwaves are defined as conditions triggered by the temperature rising to **more than 45 degrees Celsius**. When temperatures soar **above 47 degrees Celsius**, it is known as a **severe heatwave**.

GS : 3 - ENERGY

India becomes Net Exporter of Electricity for the first Time

(PIB)

- As per **Central Electricity Authority**, the Designated Authority of Government of India for Cross Border Trade of Electricity, 1st time India has turned around from a **net importer of electricity to Net Exporter of electricity**.

Key facts:

- Ever since the cross border trade of electricity started in mid-Eighties, India has been importing power from Bhutan and marginally exporting to Nepal. On an average Bhutan has been supplying around 5,000- 5500 Million units to India.
- The export of power to Nepal further increased with commissioning of Muzaffarpur (India)–Dhalkhebar (Nepal) in 2016.
- Export of power to Bangladesh from India got further boost with commissioning of 1st cross border Interconnection between Baharampur in India and Bheramara in Bangladesh in September 2013.
- It was further augmented by commissioning of 2nd cross border Interconnection between Surjyamani nagar (Tripura) in India and South Comilla in Bangladesh.

GS : 3 - ENVIRONMENT

Kanha Tiger Reserve becomes first in India to get official mascot

- Kanha Tiger Reserve has become the first tiger reserve in India to officially **introduce a mascot**, named **Bhoorsingh the Barasingha**.
- The step was taken to present the hard ground swamp deer as the spirit of the reserve. It will also spread awareness to save the species from possible extinction.
- **Barasingha (swamp deer)** is the **state animal of Madhya Pradesh**. The Kanha tiger reserve is the **only place in the world where the species exists**.

About barasingha

- The barasingha is a deer species distributed in the Indian subcontinent.
- Populations in northern and central India are fragmented, and two isolated populations occur in south-western Nepal. The species is extinct in Pakistan and in Bangladesh.
- The species differs from all the Indian deer species in that the antlers carry more than three times. Because of this distinctive character, the species is designated barasingha, meaning "twelve tined."
- Their population outside protected areas and seasonally migrating populations are threatened by poaching for antlers and meat.
- They lost most of its former range because wetlands were converted and used for agriculture.

About Kanha Tiger Reserve

- The Kanha Tiger Reserve is the largest national park of Madhya Pradesh.

- The **Kanha National Park** was created on **1 June 1955**. In **1973**, the **Kanha Tiger Reserve** was made.
- At present, it stretches over an area of 940 km in the two districts Mandla and Balaghat.
- It has a significant population of Bengal tiger, Indian leopards, the sloth bear, barasingha and Indian wild dog.
- The lush sal and bamboo forests, grassy meadows and ravines of the park provided inspiration to **Rudyard Kipling** for his famous novel **Jungle Book**.

GS : 2 - INTERNATIONAL ORGANISATIONS

Third meeting of G-20 framework working group to be held at Varanasi

(PIB)

- The 3rd G-20 Framework Working Group (FWG) Meeting under the G-20 German Presidency is being co-hosted by **Department of Economic Affairs, Ministry of Finance, Govt. of India and Reserve Bank of India (RBI)** in Varanasi.
- The first two G 20 FWG meetings under the G-20 German Presidency have already been held at Berlin in Dec 16 and at Riyadh in Feb 17.

Key facts:

- Since the inception of the FWG in 2009, this is the fourth occasion that India is hosting this meeting. Previously, India had hosted the G-20 FWG Meetings in **Neemrana, Rajasthan** (2012 under Mexican Presidency), in **Goa** (in **2014** under G-20 Australian Presidency) and in **Kerala** (2015 under G-20 Turkish Presidency).
- In the meeting the G-20 FWG held discussion on the current global economic situation as well as deliberated on the policy options that countries can pursue to counter the important development challenges.
- One important focus of this meeting was to deliberate on the inclusive growth agenda of G-20 and to formulate a framework that will enable countries to help frame country specific inclusive growth policies.

G-20:

- The G-20 is the group of **19 countries and European Union (EU)** deliberating on global economic issues and other important development challenges.
- G-20 Framework Working Group (FWG) is one of the core working groups of G-20.
- The mandate of FWG is to deliberate on the challenges facing the global economy and the policy options that countries can use to address these challenges.
- **India along with Canada has been co-chairing this group.**
- Its members include India, Australia, Argentina, Brazil, Canada, China, France, Germany, Indonesia, Italy, Japan, South Korea, Mexico, Saudi Arabia, Russia, Turkey, South Africa, UK, US and EU.

GS : 3 - ENVIRONMENT

Supreme Court bans sale of BS-III vehicles

- The Supreme Court ordered a freeze on the registration and sale of **BS-III fuel compliant vehicles** by “any manufacturer or dealer” on and from April 1, when the next level and **environmentally friendly BS-IV fuel emission standards** are scheduled to kick in.

BS-IV fuel emission standards:

- **Introduced in 2000**, the Bharat norms are emission control standards that are based on **the European regulations (Euro norms)**.
- They set limits for release of air pollutants from equipment using internal combustion engines, including vehicles.
- Typically, the higher the stage, the more stringent the norms.
- The BS IV norms were introduced in 13 cities apart from the National Capital Region from April 2010 onwards.
- According to the roadmap, the entire nation was to be covered under BS IV by April 1, 2017.
- BS IV norms stipulate only **50 parts per million sulphur compared with up to 350 parts per million under BS III**.
- Also, hydrocarbon, nitrogen oxide and particulate matter emissions are lower under BS IV.

GS : 3 - ECONOMY

Lok Sabha passes GST supplementary bills

(Indian Express)

- The Lok Sabha passed the much-awaited **Central Goods and Services Tax (GST) Bill, Integrated GST Bill, Compensation GST Bill and Union Territory GST Bill 2017**, after negating all the amendments put forward by the Opposition.

- The GST Council has recommended a **four-tier tax structure — 5, 12, 18 and 28 per cent.**
- On top of the highest slab, a **cess will be imposed on luxury and demerit goods** to compensate the states for revenue loss in the first **five years** of GST implementation.
- However, the Central GST (CGST) law has pegged the peak rate at 20 per cent and a similar rate has been prescribed in the State GST (SGST) law, which takes the peak rate to 40 per cent which will come into force only in financial exigencies.

MISCELLANEOUS

MoRTH rolls out new accident recording and reporting format

(The Hindu)

- A new Road Accident Data Recording and Reporting Format has been rolled out by the Ministry of Road Transport and Highways (MoRTH) as part of the aim to move closer towards an accurate, consistent and objective road accident database.

Key facts:

- Besides, the comprehensive recording and reporting format, to be executed by **all States and Union Territories**, is also aimed at bringing out the underlying real cause of the road accident so that stakeholders can take corrective and preventive steps.
- The recording format, to be filled in by the police at the site of the road accident, has five sections specifically to record primary data on road accidents (and not to replace the FIR), capturing the actual circumstances of the accident.
- The five sections include Accident identification details, road related details, vehicles involved in accident, drivers details and persons other than drivers involved in accident.
- As many as 55 indices, including weather condition, GPS location, surface condition of road, road type, speed limit, visibility at the time of the accident, physical divider, ongoing road works, road features, road junction, type of traffic control, pedestrian involved, load condition of the vehicle, age of the vehicle, drivers details, impacting vehicle and use of safety device has been incorporated in the new recording form.

World Food Program

- The World Food Programme is the world's largest humanitarian agency fighting hunger worldwide.
- In emergencies, we get food to where it is needed, saving the lives of victims of war, civil conflict and natural disasters. After the cause of an emergency has passed, we use food to help communities rebuild their shattered lives.
- WFP is part of the **United Nations** system and is **voluntarily funded**.
- **Born in 1961**, WFP pursues a vision of the world in which every man, woman and child has access at all times to the food needed for an active and healthy life. WFP works towards that vision with its sister UN agencies in Rome -- the **Food and Agriculture Organization (FAO)** and the **International Fund for Agricultural Development (IFAD)** -- as well as other government, UN and NGO partners.
- **Headquarters:** Rome

31st Mar. 2017

GS : 2 - GOVERNMENT INITIATIVES

Gujarat Assembly passes Gujarat Animal Preservation (Amendment) Bill, 2017

(Indian Express)

- Gujarat Assembly has passed the Gujarat Animal Preservation (Amendment) Bill, 2017 to amend Gujarat Animal Preservation Act, 1954.
- The amendment bill makes the existing law stricter and provides for harsher punishment and higher penalties to prevent cow slaughter in the state.
- This bill has more stringent provision against the cow slaughtering and cow transportation for slaughtering. It allows cow transportation only with permit issued by Government authority.

Key points:

- Only 7 officials are notified for issuance of permit contrary to 25 earlier. It does not allow transportation of cows during night hours.
- It also makes slaughtering of cow cognizable and non-bailable offence.
- It raises the minimum jail term for illegal ferrying of cows for slaughter from 7 to 10 years against the current

provision of 3 to 7 years.

- Vehicle used for illegal cow transportation will be seized permanently by the Government.
- Gujarat Government had enacted the Gujarat Animal Preservation Act-1954 as per Article 48 of Constitution for the preservation of milch animals, and for cattle that are suitable for breeding or agricultural purposes.
- It was amended in 2011 for better implementation of the Act.

GS : 2 - GOVERNMENT POLICIES

Cabinet approves Amendment to New Urea Policy-2015

(PIB)

Why in news?

- The Cabinet Committee on Economic Affairs, chaired by the Prime Minister has given its approval for amendment in Para 5 of New Urea Policy (NUP) - 2015 relating to the production beyond Re-Assessed Capacity (RAC) and inclusion of Para 8 in NUP - 2015.
- The said amendment will protect the production beyond RAC by the urea units and is expected to boost indigenous urea production in the country.

Key points:

- Its objective is to maximising indigenous urea production, promoting energy efficiency in the urea units and rationalizing the subsidy burden on the Government.
- By aforesaid amendment, ceiling imposed on production beyond Re-Assessed Capacity during the year 2016-17, has been raised so as to enable all urea unit to produce additional production which otherwise were not able to do so due to low Import Parity Price.
- All stakeholders namely farmers, urea manufacturers and the Government would be benefitted from the amendment.

Background:

- Earlier, with the approval of CCEA, Department of Fertilizers has made it mandatory for all the indigenous urea producers to neem coat 100% of their production of urea, with the objective of promoting balanced use of fertilizers, to increase Nitrogen Use Efficiency and to prevent diversion of urea for the purpose other than agriculture.

GS : 1 - GEOGRAPHY (NATURAL RESOURCES)

'Significant incidences' of gold found in Uttarakhand

(Economics Times)

- Scientists at the Geological Survey of India (GSI) have discovered, for the first time, "significant incidences" of gold associated with copper mineralisation in parts of Rudraprayag district of Uttarakhand.

Key points:

- Gold occurs as coarse, liberated particles and fine particles locked in pyrite and copper sulphide.
- According to the report, the regions bearing gold are best exposed around Rudraprayag town in the Mandakini river valley.
- Panning of stream sediments of Alaknanda and Mandakini rivers in Sumerpur-Ratura, Sari and Jugtoli areas also revealed a few visible gold flakes.
- This part of Uttarakhand where significant incidences of gold has been discovered is in what is known as the "Lesser Himalaya" that is sandwiched, in the north, by the Main Central Thrust — the major geological fault where the Indian Plate has been pushed under the Eurasian Plate along the Himalaya — and in the south by North Almora Thrust.



Background:

- According to the GSI, gold is currently produced from three mines — Hutti, Uti and Hirabuddni in Karnataka —

and, as a by-product, from the base metal sulphide deposits of Khetri in Rajasthan and Mosabani, Singhbhum, and Kundera kocha in Jharkhand.

- Apart from the gold mines in the above-mentioned areas, some gold, although very small in quantity, is collected by “panning” from the sand and gravel of several rivers, including the Subarnarekha in Jharkhand and the Ambankadava Puzha and Chabiyar Puzha in Kerala.

GS : 2 - GOVERNMENT INITIATIVES

Government launch e-challan and m-parivahan apps for enforcement of traffic rules

(PIB)

- The Union Ministry of Road Transport and Highways has launched two mobile applications —e-challan and m-parivahan to provide a comprehensive digital solution for enforcement of traffic rules.
- These applications will provide access to various services and information, and enable citizens to report any traffic violation or road accident.
- m-parivahan It is a citizen-centric app that will facilitate access to various transport-related services. It will bring convenience to citizen and transparency in the system.
- eChallan is an integrated enforcement solution to manage traffic violations through mobile app and back-end web application, for use by the Traffic Police and Transport Enforcement Wing.

MISCELLANEOUS

El Salvador becomes world’s first country to ban metal mining

- Central America’s smallest nation El Salvador became first country in the world to ban metal mining nationwide.
- In this regard, it has passed a law that bans all mining for gold and other metals.
- The law imposes broad prohibition on the extraction of minerals to protect the nation’s allegedly quite fragile environment, water reservoirs and reduce social tensions.

New Development Bank (NDB)

- It is a multilateral development bank operated by the BRICS states (Brazil, Russia, India, China and South Africa).
- It is seen as an alternative to the existing US-dominated World Bank and International Monetary Fund.
- The New Development Bank was agreed to by BRICS leaders at the 5th BRICS summit held in Durban, South Africa in 2013.
- The bank is set up to foster greater financial and development cooperation among the five emerging markets.
- The bank will be headquartered in Shanghai, China.
- Voting: Unlike the World Bank, which assigns votes based on capital share, in the New Development Bank each participant country will be assigned one vote, and none of the countries will have veto power.

Goods and Service Tax Network

- The GSTN is a private limited company floated to aid the rollout of the new indirect tax regime.
- The company will provide information technology support to all stakeholders for smooth implementation of the new taxation regime across the country and will be the repository of all information related to taxation and entities registered under GST.
- The majority (51%) shareholding in the firm is with private entities including HDFC Bank, ICICI Bank and LIC among others.
- The central government, jointly with state governments and Union Territories, own 49% in the company.

Kanha tiger reserve becomes first in India get official mascot

- Kanha has become the first tiger reserve in India to officially introduce a mascot — Bhoorsingh the Barasingha — to present the hard ground swamp deer as the spirit of the reserve and spread awareness to save it from possible extinction.
- Barasingha, or swamp deer, is the state animal of Madhya Pradesh. The Kanha tiger reserve, spread over Mandla and Balaghat districts, is the only place in the world where the species exists.