



ESE - PRELIMS CURRENT ISSUES

(January 2018 - May 2018)



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ESE

(Prelims)

Current Issues

(January to May 2018)

On

Economic & Industrial Development

Issues on Social Development

International Issues

Environment

Science & Technology

Miscellaneous

ACE is the leading institute for coaching in ESE, GATE & PSUs

H O: Sree Sindhi Guru Sangat Sabha Association, # 4-1-1236/1/A, King Koti, Abids, Hyderabad-500001.

Ph: 040-23234418 / 19 / 20 / 21, 040 - 24750437

7 All India 1st Ranks in ESE
43 All India 1st Ranks in GATE

Foreword

Current Issues for ESE



Dear Students,

This book is intended to help students, prepare current affairs on a monthly basis. The topics covered give a comprehensive understanding on issues related to Socio, Economic, Industrial Development, Energy and Environment and ICT based tools.

Apart from technical knowledge, current affairs help an aspirant to understand issues in a multi-dimensional approach and contributes to a holistic personality development. The coverage of news and events given are the most pertinent for ESE Revised pattern.

The key to master current affairs is a 'piece-meal preparation' over a period of time and this material is an endeavor to help students prepare in a systematic manner.

This issue covers Current Affairs from January to May 2018 and subsequent issues will be given on a bi-monthly basis.

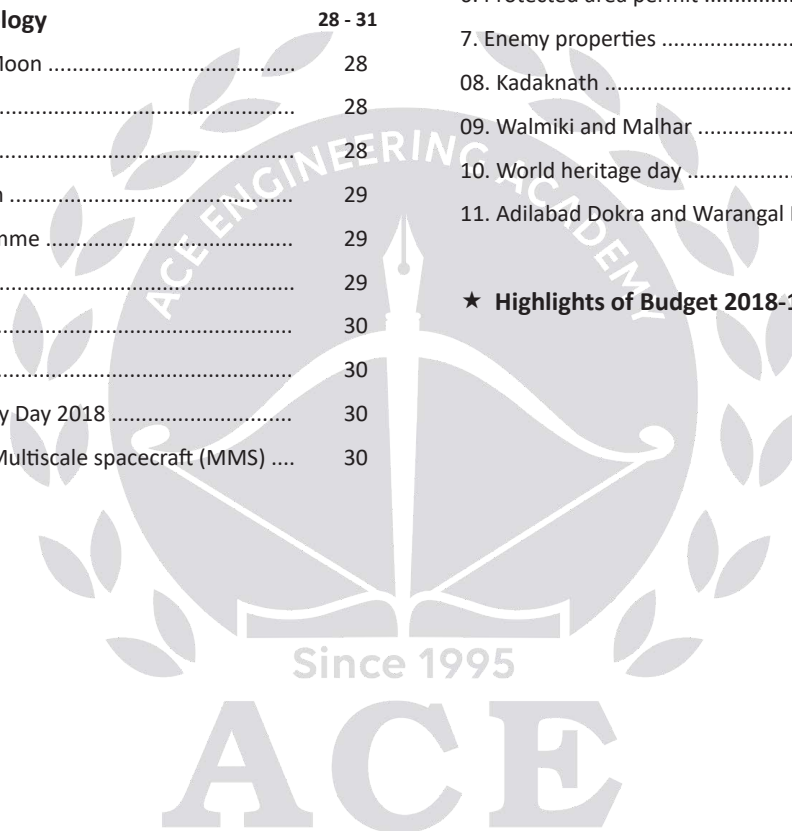
With best wishes to all the Students

Y.V. Gopala Krishna Murthy,
M Tech. MIE,
Chairman & Managing Director,
ACE Engineering Academy,
ACE Engineering Publications.

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FINANCIAL MARKETS

1. SEBI amends norms for REITs

- SEBI has amended REITs (Real Estate Investment Trusts) and InvITs (Infrastructure Investment Trusts) regulations to facilitate the growth of such trusts. As per the amendments, REITs and InvITs will now have to provide a mechanism for resolution of disputes with their shareholders and partners in the holding firm.
- REITs are similar to mutual funds. While mutual funds provide for an opportunity to invest in equity stocks, REITs allow one to invest in income-generating real estate assets.

2. CriSidEx

- CriSidEx, India's First MSE Sentiment Index, has been launched by CRISIL and SIDBI.
- CriSidEx is a composite index based on a diffusion index of 8 parameters and measures MSE business sentiment on a scale of 0 (extremely negative) to 200 (extremely positive).
- Benefits: The crucial benefit of CriSidEx is that its readings will flag potential headwinds and changes in production cycles and thus help improve market efficiencies. And by capturing the sentiment of exporters and importers, it will also offer actionable indicators on foreign trade.

- Trivia: MSME sector is backbone of the economy. This is one sector where people not only exhibit their entrepreneurial skills, become part of large value chains but also become job creators in the process. And that is the reason why a bulk of the jobs in manufacturing, trading have been created in this particular sector.

3. Fugitive Economic Offenders Ordinance 2018

- The Union Cabinet has approved the Finance Ministry's proposal of promulgating the Fugitive Economic Offenders Ordinance, 2018 which will empower authorities to attach and confiscate properties and assets of economic offenders like loan defaulters who flee the country.

A Fugitive Economic Offender is a person against whom an arrest warrant has been issued in respect of a scheduled offence and who has left India so as to avoid criminal prosecution, or being abroad, refuses to return to India to face criminal prosecution.



Offences worth ₹100 crore or more under the purview of the Bill

- Fugitive Economic Offenders bill to define category of economic offenders as criminals.
- Wilful defaults, cheating & forgery to be deemed as economic offense.
- The new law allows the government to impound, seize and seal assets including Benami assets of economic offenders and corporate defaulters evading law, until they surrender to the Jurisdiction of law in India.



Cabinet Decision
March 01, 2018

Fugitive Economic Offenders Bill, 2018



Salient features of the Bill-

- i. Application before the Special Court for a declaration that an individual is a fugitive economic offender;
- ii. Attachment of the property of a fugitive economic offender;
- iii. Issue of a notice by the Special Court to the individual alleged to be a fugitive economic offender;
- iv. Confiscation of the property of an individual declared as a fugitive economic offender resulting from the proceeds of crime;
- v. Confiscation of other property belonging to such offender in India and abroad, including benami property;
- vi. Disentitlement of the fugitive economic offender from defending any civil claim; and
- vii. An Administrator will be appointed to manage and dispose of the confiscated property under the Act.

4. BSE

Asia's first stock exchange, the Bombay Stock Exchange (BSE) has become the first stock exchange in India to have received recognition as a 'Designated Offshore Securities Market' (DOSM) from the United States Securities and Exchange Commission (SEC).

TAXATION

5. Inverted duty structure

- The Union Budget has reinforced the correction of the inverted duty structure (IDS) which has adversely impacted manufacturing for decades.
- The Budget has raised customs duties significantly. The goods and services tax (GST), especially the IGST or Integrated GST component, has begun to erode the advantage that the IDS was giving to foreign exporters in Indian markets.
- Also, the Finance Minister, in Budget 2014, had announced the beginnings of a reversal of the IDS in electronics and has sustained that effort in subsequent Budgets.
- An IDS means higher duty on intermediate as opposed to final/finished goods, with the latter often enjoying concessional custom duty under some schemes. Inverted duty structure is a situation where import duty on finished goods is low compared to the import duty on raw materials that are used in the production of such finished goods. For example, suppose the tariff (import tax) on

the import of tyres is 10% and the tariff on the imports of natural rubber which is used in the production of tyres is 20%; this is a case of inverted duty structure.

AGRICULTURE AND INDUSTRY

6. Laghu Udyog Bharati

Laghu Udyog Bharati is a registered all India organization of Micro and Small Industries in India since 1994. Today, Laghu udyog Bharati has its membership spread over the length and breadth of the country.

It has membership in more than 400 Districts with 250 Branches all over the Country. In a genuine effort to organise MSE sector Laghu Udyog Bharati is fighting the various ills plaguing the sector and to remove impediments coming in the way to MSEs.

Laghu Udyog Bharati renders assistance to small scale industries as follows:

- Removal of inspector raj & simplification procedures.
- Availability & distribution of power.
- Guidance for improving productivity.
- Quality & technological upgradation & modernisation.
- Sales promotion & marketing assistance.
- Encouraging women entrepreneurs.
- Creating congenial environment for better entrepreneur, worker and customer relations.
- Making various panels for better representation.

- Participation in Trade-Fairs and Exhibitions for better product exposure.

7. Operation Greens

- Operation Green (OG) wants to replicate the success story of Operation Flood, in fruits and vegetables, starting with three basic vegetables—tomatoes, onions and potatoes (TOP).
- The main objective of OG is to reduce price volatility in these commodities, and thereby helping farmers augment incomes on a sustainable basis, as also provide these basic vegetables to consumers at affordable prices.

Operation Greens aims to promote farmer producers organisations, agri-logistics, processing facilities and professional management. The operation aims to aid farmers and help control and limit the erratic fluctuations in the prices of onions, potatoes and tomatoes. It was announced by Finance Minister Arun Jaitley in his budget speech.

8. Zero Budget Natural Farming project

- Himachal Pradesh has launched Zero Budget Natural Farming project to promote organic farming.
- Zero Budget Natural Farming, as the name implies, is a method of farming where the cost of growing and harvesting plants is zero. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops.

- It is, basically, a natural farming technique that uses biological pesticides instead of chemical-based fertilizers. Farmers use earthworms, cow dung, urine, plants, human excreta and such biological fertilizers for crop protection. It reduces farmers' investment. It also protects the soil from degradation.
- Trivia: Both traditional farming, using chemical fertilisers and pesticides, and organic farming are becoming unviable for farmers. The organic farming was costlier than the traditional farming as the farm inputs were expensive.

9. Krishonnati Yojana

- The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi has given its approval for the Umbrella Scheme, "Green Revolution – Krishonnati Yojana" in agriculture sector beyond 12th Five Year Plan for the period from 2017-18 to 2019-20 with the Central Share of Rs. 33, 269.976 crore.

The Umbrella scheme comprises of 11 Schemes/Missions.

- (i) Mission for Integrated Development of Horticulture (MIDH): MIDH aims to promote holistic growth of horticulture sector; to enhance horticulture production, improve nutritional security and income support to farm Households.
- (ii) National Food Security Mission (NFSM), including National Mission on Oil Seeds

and Oil Palm (NMOOP): It aims to increase production of rice, wheat, pulses, coarse cereals and commercial crops, through area expansion and productivity enhancement in a suitable manner in the identified districts of the country, restoring soil fertility and productivity at the individual farm level and enhancing farm level economy. It further aims to augment the availability of vegetable oils and to reduce the import of edible oils.

- (iii) National Mission for Sustainable Agriculture (NMSA): NMSA aims at promoting sustainable agriculture practices best suitable to the specific agro-ecology focusing on integrated farming, appropriate soil health management and synergizing resource conservation technology.
- (iv) Submission on Agriculture Extension (SMAE): MAE aims to strengthen the ongoing extension mechanism of State Governments, local bodies etc., achieving food and nutritional security and socio-economic empowerment of farmers.
- (v) Sub-Mission on Seeds and Planting Material (SMSP):
SMSP aims to increase production of certified / quality seed, to increase SRR, to upgrade the quality of farm saved seeds, to strengthen the seed multiplication chain, to promote new technologies and methodologies in seed production, processing, testing etc.,



Vi) Sub-Mission on Agricultural Mechanisation (SMAM):

SMAM aims to increase the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low.

to promote 'Custom Hiring Centres' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership.

to create hubs for hi-tech and high value farm equipment, to create awareness among stakeholders through demonstration and capacity building activities, and to ensure performance testing and certification.

vii) Sub Mission on Plant Protection and Plant Quarantine (SMPPQ):

SMPPQ aims to minimize loss to quality and yield of agricultural crops from the ravages of insect pests, diseases, weeds, nematodes, rodents, etc.

(viii) Integrated Scheme on Agriculture Census, Economics and Statistics (ISACES):

It aims to undertake the agriculture census, study of the cost of cultivation of principal crops.

(ix) Integrated Scheme on Agricultural Cooperation (ISAC):

It aims to provide financial assistance for improving the economic conditions of cooperatives, remove regional imbalances and to speed up - cooperative development in agricultural marketing,

processing, storage, computerization and weaker section programmes

(x) Integrated Scheme on Agricultural Marketing (ISAM):

ISAM aims to develop agricultural marketing infrastructure.

(xi) National e-Governance Plan (NeGP-A):

Aims to bring farmer centricity & service orientation to the programmes.

10. Micro-irrigation fund

➤ The government approved a dedicated Rs5,000 crore fund to bring more land area under micro-irrigation as part of its objective to boost agriculture production and double the farmer's income by 2022.

➤ Micro Irrigation Fund (MIF) has been setup with NABARD under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). An allocation of Rs2,000 crore has been made for this fiscal while Rs3,000 crore has been earmarked for the 2019-20 fiscal. NABARD will extend the loan to state governments during this period.

➤ NABARD will provide this amount to states on concessional rate of interest.

➤ The lending rate under MIF has been proposed at 3% lower than the cost of raising the fund by NABARD. This cost would be met from the ongoing scheme of PMKSY-PDMC (per drop more crop component) by amending the existing guidelines.



INFRASTRUCTURE

11. Jogighopa

- Jogighopa, a small town in Assam, is set to become India's gateway to South-East Asia as well as the rest of the North-East with the road ministry gearing up to develop a multimodal logistics park (MMLP) there with road, rail, waterways and air transport facilities.
- The development includes railway sidings, container terminals, warehousing, non-cargo processing, a truck terminal, common facilities, support infrastructure and equipment.
- Under the project, all four types of transportation: road, rail, air and waterways will be available. A special purpose vehicle, backed by the Asian Development Bank (ADB), will be created to execute the project, which will be executed in two phases.

12. India and arms import

- India has emerged as the largest importer of major arms according to a latest research released by the Stockholm International Peace Research Institute (SIPRI).
- Trivia: India became the world's largest importer of major arms in 2013-17 accounting for 12% of the total global import.
- The country that accounts for the maximum arms import of India is Russia with 62%.
- America is the second largest arms supplier to India.

13. India - steel producer

- India remained the world's third-largest steel producer for the third year in a row in 2017 according to the latest data released by World steel Association. India had grabbed the third slot in steel production in 2015 from the US after long been holding the fourth slot.
- In 2017, China and Japan have occupied top two positions respectively.

14. "Res extra commercium"

- To curb the \$11 billion tobacco industry's legal right to trade, the government, for the first time, has asked the top court to classify tobacco as "res extra commercium", which is a Latin phrase for "outside commerce". The move is part of the government's effort to tame the tobacco companies looking to challenge tough regulations pertaining to the industry.

Res extra commercium means things beyond commerce, i.e., which cannot be brought or sold, such as public roads, rivers, titles of owners etc.

15. SFOORTI Application

- To help plan the traffic flows and optimize freight operations, Ministry of Railways have launched Smart Freight Operation Optimisation & Real Time Information (SFOORTI) App for Freight Managers which provides features for monitoring and managing freight business using Geographic



Information System (GIS) Views and Dashboard.

Features:

- With this application, movement of freight trains on Geographic Information System (GIS) view can be tracked.
- Both passenger and freight trains can be tracked over Zones/Divisions/ Sections in single GIS View.
- Freight business can be monitored.
- Comparative Analysis of Zonal/Divisional Traffic.
- Analysis of new traffic captured and traffic lost.
- This app provides a Bird's eye view of all Freight Assets in a single window.
- Provides end to end Rake movement on Geospatial view
- Expected Traffic at Interchange points to evaluate daily performance can be viewed.
- Performance of each zone and divisions with respect to loading and utilization of freight assets can be viewed.
- Sectional performance monitoring for sections, divisions and zones shall help in traffic routing.
- Freight terminal and sidings can be better monitored to ensure better turnaround of rakes.

16. NABH (Nextgen Airports For Bharat) Nirman initiative

Shri Suresh Prabhu, Minister for Civil Aviation today said that the government is committed to the building of airport capacity as part of NABH (NextGen Airports for BHarat) Nirman initiative.

The three key aspects of NABH Nirman are

- (1) Fair and equitable land acquisition,
- (2) Long-term master plan for airport and regional development and
- (3) Balanced economics for all stakeholders.

Improving passenger amenities, promoting cargo handling facilities and early operationalisation of 56 new airports under UDAN scheme will be the focus areas while simultaneously working on improving regional connectivity and improving passenger services in a big way.

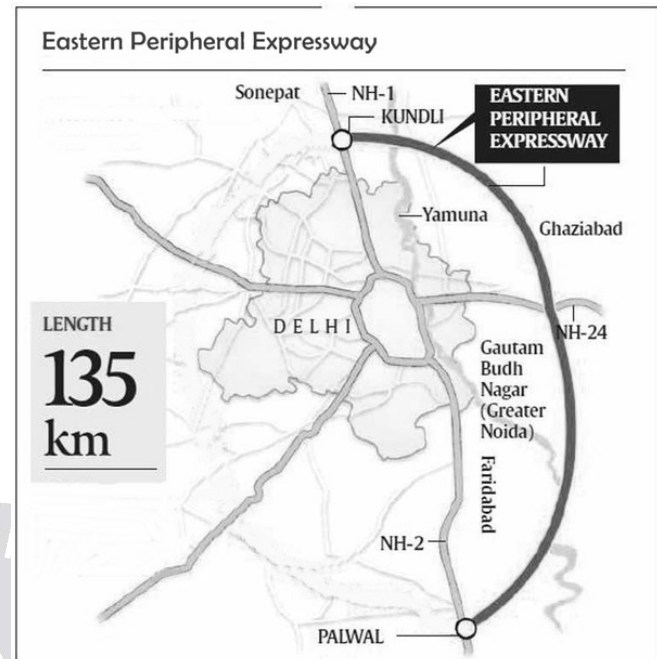
17. Parcel Cargo Express Train

- In line with Government's priority to provide connectivity to Northeast region and empowering local industries of this region particularly, Northeast Frontier Railway has started operating one lease Parcel Cargo Express Train (PCET) on fortnightly basis, connecting Northeastern part of the country to the West Coast.
- The route of this Parcel Cargo Express Train lease is: New Guwahati in Assam to Kalyan in Maharashtra with stoppages at New Jalpaiguri, Kalumna Goods Shed.
- This move would enable farmers to market their products like tea, betal nuts, pineapple,

jute, horticulture products, cane furniture etc. at the retail markets in Mumbai, Bengaluru, Nagpur, Pune etc. This initiative will not only promote industries of the region particularly but will also provide sustainable job opportunity to the local youths including unskilled labour. (pib)

18. Eastern Peripheral Expressway

- The 135- km expressway connects National Highway 1 and 2 from the eastern side of Delhi and aims to decongest and de-pollute the national capital by diverting traffic.
- It commences near Kundli in Haryana and terminates near Palwal by passing through Sonapat, Baghpat, Ghaziabad, Noida, Faridabad and Palwal.
- It is India's first highway to be lit by solar power besides provisions of rain water harvesting on every 500 metres on both sides and would showcase 36 national monuments and 40 fountains.



- The state-of-the-art road will have auto challans for over-speeding as cameras will capture speed of vehicles. It will also have provisions of tolling only for the distance travelled. The expressway has an iconic toll plaza at the entry point on Kundli side besides digital art gallery.
- Around 2.5 lakh trees have been planted near it, including transplant of 8-10 year old trees. It also has drip irrigation provision.
- The Eastern and the Western Peripheral Expressways were planned in 2006 following the apex court's order to build a ring road outside the national capital for channelling the traffic not bound for Delhi.



ENERGY

19. KUSUM scheme

- The government has announced Kisan Urja Suraksha evam Utthaan Mahaabhiyan or KUSUM scheme as part of Union Budget 2018-19.
- It is a ₹1.4 lakh-crore scheme for promoting decentralised solar power production of up to 28,250 MW to help farmers. It would provide extra income to farmers, by giving them an option to sell additional power to the grid through solar power projects set up on their barren lands.
- The components of the scheme include building 10,000 MW solar plants on barren lands and providing sops to DISCOMS to purchase the electricity produced.
- The 60% subsidy on the solar pumps provided to farmers will be shared between the Centre and the States while 30% would be provided through bank loans. The balance cost has to be borne by the farmers.

20. GOBAR-Dhan Yojana

- The government is planning to create an online platform for trading cow dung and agricultural waste under its recently announced waste to wealth scheme, GOBAR-DHAN (Galvanising Organic Bio Agro Resources) scheme.
- The Galvanizing Organic Bio-Agro Resources Dhan (GOBAR-DHAN) scheme was first announced by Finance Minister

Arun Jaitley during his budget speech on February 1.

- The scheme would focus on managing and converting cattle dung and solid waste in farms to compost, biogas and bio-CNG. It will help in keeping the village clean while increasing the income of farmers and cattle herders.

Benefits:

- As India is home to the highest cattle population in the world, close to 300 million in number, with a daily output of 3 million tonnes of dung, this is hugely helpful for the country.
- The Scheme will encourage the farmers to consider dung and other waste as a source of income.
- It will provide many benefits to the rural people.
- It will be easier to keep the village clean and sanitized, livestock health will improve and farm yields will increase.
- Biogas generation will increase self-reliance in energy utilized for cooking and lighting.
- Farmers and cattle herders will be helped in augmenting their income. There will be novel opportunities for newer jobs linked to waste collection, transportation, biogas sales etc.
- The scheme also provides a stable fuel supply in the market for oil companies and accessible credit in the market through government schemes and banks for entrepreneurs.

21. PM Ujjwala Yojana

- Pradhan Mantri Ujjwala Yojana has been launched in Delhi. The Cabinet, in February 2018, had approved the increase in the target for the Pradhan Mantri Ujjwala Yojana to eight crore from the earlier five crore. This has to be achieved by 2020.
- Pradhan Mantri Ujjwala Yojana aims to provide LPG (liquefied petroleum gas) connections to poor households.

22. Shakti Sthala

The Karnataka government recently inaugurated the world's largest solar park, Shakti Sthala. It is located in Tumkur district, about 180km from Bengaluru. The park ties in with the centre's scheme to generate 100 gigawatts (GW) of solar power by 2020. It has a capacity of 2,000 MW.



It is part of the “Karnataka Solar Policy 2014-2021” which aims to decrease dependence on traditional power sources and move to environmentally friendly ones to meet the growing power needs of the state.

23. India-Japan Energy Dialogue

- The 9th India Japan Energy Dialogue was held in New Delhi. Minister of State(IC) for Power and New & Renewable Energy, Shri R.K Singh, and Minister of Economy, Trade and Industry (METI) Mr. Hiroshige Seko signed a Joint Statement at the conclusion of the meeting.
- Both Japan and India, as the third and the seventh largest economies respectively, recognized that having access to reliable, clean and economical energy is critical for their economic growth and in achieving this, both Ministers agreed on further strengthening of bilateral energy cooperation for energy development of both countries, while also contributing to worldwide energy security, energy access and climate change issues.
- Both countries agreed to initiate the discussion towards development of Electric Vehicles (EVs) by collaborating with "Policy dialogue on next generation/Zero emission vehicles".

24. National Wind-Solar Hybrid Policy

- The objective of the policy is to provide a framework for promotion of large grid connected wind-solar PV hybrid system for efficient utilization of transmission infrastructure and land.

- It also aims at reducing the variability in renewable power generation and achieving better grid stability.
- On technology front the Policy provides for integration of both the energy sources i.e. wind and solar at AC as well as DC level.
- The Policy provides for procurement of power from a hybrid project on tariff based transparent bidding process for which Government entities may invite bids.



- Policy also permits use of battery storage in the hybrid project for optimising the output and further reduce the variability. It mandates the regulatory authorities to formulate necessary standards and regulations for wind-solar hybrid systems.

25. National Policy on Biofuels – 2018

- The Policy categorises biofuels as: “Basic Biofuels” viz. First Generation (1G)

bioethanol & biodiesel and “Advanced Biofuels” – Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.

- The Policy expands the scope of raw material for ethanol production by allowing use of Sugarcane Juice, Sugar containing materials like Sugar Beet, Sweet Sorghum, Starch containing materials like Corn, Cassava, Damaged food grains like wheat, broken rice, Rotten Potatoes, unfit for human consumption for ethanol production.
- Farmers are at a risk of not getting appropriate price for their produce during the surplus production phase. Taking this into account, the Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.
- The Policy encourages setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, Used Cooking Oil, short gestation crops.

Classification of Biofuels:

- 1st generation biofuels are also called conventional biofuels. They are made from things like sugar, starch, or vegetable oil. Note that these are all food products. Any biofuel made from a feedstock that can also



be consumed as a human food is considered a first generation biofuel.

- 2nd generation biofuels are produced from sustainable feedstock. The sustainability of a feedstock is defined by its availability, its impact on greenhouse gas emissions, its impact on land use, and by its potential to threaten the food supply. No second generation biofuel is a food crop, though certain food products can become second generation fuels when they are no longer useful for consumption. Second generation biofuels are often called “*advanced biofuels*.”
- 3rd generation biofuels are biofuel derived from algae. These biofuels are given their own separate class because of their unique production mechanism and their potential to mitigate most of the drawbacks of 1st and 2nd generation biofuels.

INDICES

26. Democracy Index

- Democracy Index report for the year 2017 as been released by The Economist Intelligence Unit.
- The report shows that democracy is in decline across the world. It is the worst performance since 2010-'11 in the aftermath of the global financial crisis.
- The index ranks 165 independent states and two territories on the basis of five categories: electoral process and pluralism, civil liberties, the functioning of government, political

participation and political culture. The list has been divided into four broad categories — full democracy, flawed democracy, hybrid regime and authoritarian regime.

- The top of the list are Norway, Iceland and Sweden while the bottom of the list are Chad, Syria and North Korea.
- India has slipped to 42nd place from 32nd on the Economist Intelligence Unit's annual Global Democracy Index and remains classified among “flawed democracies”.

27. World Press Freedom Index

- Published every year since 2002 by Reporters Without Borders, the World Press Freedom Index is an important advocacy tool based on the principle of emulation between states.
- The Index ranks 180 countries according to the level of freedom available to journalists.
- It is a snapshot of the media freedom situation based on an evaluation of pluralism, independence of the media, quality of legislative framework and safety of journalists in each country.
- It does not rank public policies even if governments obviously have a major impact on their country's ranking. Nor is it an indicator of the quality of journalism in each country.

This year rankings:

- Norway is first for the second year running, followed by Sweden.



- India has dropped from rank 136 last year to rank 138 this year. India fared poorly on indicators such as hate speeches, attacks on journalists on social media, trolling them and targeting their reputation.

28. Environmental Performance Index

- The 2018 Environmental Performance Index (EPI) (the green rankings) was recently released on the sidelines of the World Economic Forum meet in Davos. The biennial index is prepared by Yale and Columbia Universities along with the World Economic Forum (WEF).
- The 10th EPI report ranks 180 countries on 24 performance indicators across 10 categories covering environmental health and ecosystem vitality.

Rankings:

- Switzerland leads the world in sustainability, followed by France, Denmark, Malta and Sweden.
 1. Switzerland
 2. France
 3. Denmark
 4. Malta
 5. Sweden
 - .
 - .
- 177. India
- 179. Bangladesh

- India is among the bottom five countries on the Index, plummeting 36 points from 141 in 2016. Overall, India (at 177) and Bangladesh (179) come in near the bottom of the rankings, with Burundi, Democratic Republic of the Congo and Nepal rounding out the bottom five.
- India's overall low ranking was linked to poor performance in the environment health policy and deaths due to air pollution categories.

29. Inclusive Development Index

- Inclusive Development Index, released by the World Economic Forum has been developed as a new metric of national economic performance as an alternative to GDP. The index takes into account the living standards, environmental sustainability and protection of future generations from further indebtedness.
- The 2018 index, which measures progress of 103 economies on three individual pillars : growth and development; inclusion; and inter-generational equity. The index has also classified the countries into five sub-categories in terms of the five-year trend of their overall Inclusive Development Growth score: receding, slowly receding, stable, slowly advancing and advancing.

Rankings:

- India is placed at the 62nd place among emerging economies much below China's 26th position and Pakistan's 47th. India was



ranked 60th among 79 developing economies last year.

- Despite its low overall score, India is among the ten emerging economies with 'advancing' trend. Only two advanced economies have shown 'advancing' trend. Of the three pillars that make up the index, India ranks 72nd for inclusion, 66th for growth and development and 44th for inter-generational equity.

- Norway remains the world's most inclusive advanced economy. Among advanced economies, Norway is followed by Ireland, Luxembourg, Switzerland and Denmark in the top five.
- Lithuania again tops the list of emerging economies. It is followed by Hungary, Azerbaijan, Latvia and Poland.



2

Issues on Social Development

EDUCATION

1. Revitalising Infrastructure and Systems in Education (RISE)

- Under RISE, all centrally-funded institutes (CFIs), including central universities, IITs, IIMs, NITs and IISERs, can borrow from a Rs 1,00,000 crore corpus over the next four years to expand and build new infrastructure.
- The initiative aims to step up investments in research and related infrastructure in premier educational institutions, including health institutions.
- IITs will corner the largest chunk of loans on offer under the new funding model Revitalising Infrastructure and Systems in Education (RISE) for all centrally run institutes, announced in the Union Budget. A quarter of loan amount under the scheme will be set aside exclusively for the 23 IITs. The second largest share, Rs 20,000 crore, will be earmarked for central universities.

INSTITUTE	Loans on offer from HEFA from FY 2018-19 to FY 2021-22 (In Crore)
IITs	25,000
Central universities	20,000
NITs	11,300
Institutions of eminence	10,000
IISERs	5,000
IIMs (6 new)	4,500
IIITs (set up in PPP mode)	3,000
IIITs (govt)	2,000
Language institutes	1,000
Other centrally funded institutes	1,700
Schools of Planning and Architecture	1,500
New institutes (unforeseen)	6,000
Research promotion	9,000
TOTAL	1,00,000

2. Study in India programme

- With an aim to provide students across the world an opportunity to study in Indian educational institutions, the Union HRD Ministry has launched “Study in India” programme.
- It is an innovative initiative to attract students from countries in South Asia, South-East Asia, Middle East and Africa to come and experience the very best of academic learning from the top institutions in India.
- Under the programme, meritorious students would also be provided with fee waiver and scholarship. The Institute concerned will bear the expenditure on the fee waiver based on cross-subsidisation or through its existing funding. One of the objectives for the programme is to improve global ranking for Indian educational institutes.

3. Central Institute of Higher Tibetan Studies (CIHTS)

- Prime Minister of India recently honoured the Central Institute of Higher Tibetan Studies (CIHTS) as part of celebrations to mark Buddha Purnima. The PM also highlighted ₹360 crore allocation made for the development of the Buddhist circuit.
- CIHTS is a centrally funded institute that was started in 1967 following a discussion

between Dalai Lama and Prime Minister Jawaharlal Nehru in the early 1960s.

- It was started with a view to educating the young Tibetan Diaspora and those from the Himalayan border regions of India, who have religion, culture and language in common with Tibet.
- It is located at Sarnath, Varanasi.

HEALTH

4. Ayushman Bharat

- The Government has announced two major initiatives in health sector, as part of Ayushman Bharat programme.
- The initiatives are as follows:
- Health and Wellness Centre: Under this 1.5 lakh centres will bring health care system closer to the homes of people. These centres will provide comprehensive health care, including for non-communicable diseases and maternal and child health services.
- These centres will also provide free essential drugs and diagnostic services. The Budget has allocated Rs.1200 crore for this flagship programme. Contribution of private sector through CSR and philanthropic institutions in adopting these centres is also envisaged.
- National Health Protection Scheme: This programme will cover over 10 crore poor and vulnerable families providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.

- This will be the world's largest government funded health care programme. Adequate funds will be provided for smooth implementation of this programme.
- These two health sector initiatives under Ayushman Bharat Programme will build a New India 2022 and ensure enhanced productivity, well being and avert wage loss and impoverishment. These Schemes will also generate lakhs of jobs, particularly for women.

5. World Immunization Week

- World Immunization Week is celebrated from 24th- 30th of April by the World Health Organization (WHO) in order to increase awareness about vaccination.
- It aims to highlight the collective action needed to ensure that every person is protected from vaccine- preventable diseases.

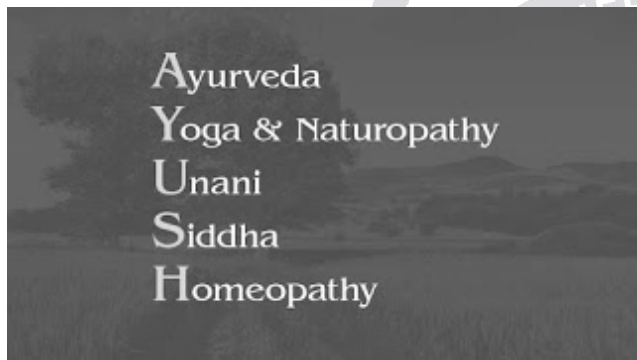
Theme: "Protected together, #VaccinesWork".

6. Lassa fever

- Nigeria has announced that it is free from Lassa fever outbreak. The announcement follows the epidemiological review by the Nigeria Centre for Disease Control (NCDC) and the World Health Organisation (WHO).
- Trivia: Lassa fever is an acute viral haemorrhagic illness of 2-21 days duration that occurs in West Africa.
- The Lassa virus is transmitted to humans via contact with food or household items contaminated with rodent urine or faeces.

- Person-to-person infections and laboratory transmission can also occur, particularly in hospitals lacking adequate infection prevention and control measures.
- Lassa fever is known to be endemic in Benin, Ghana, Guinea, Liberia, Mali, Sierra Leone, and Nigeria, but probably exists in other West African countries as well.

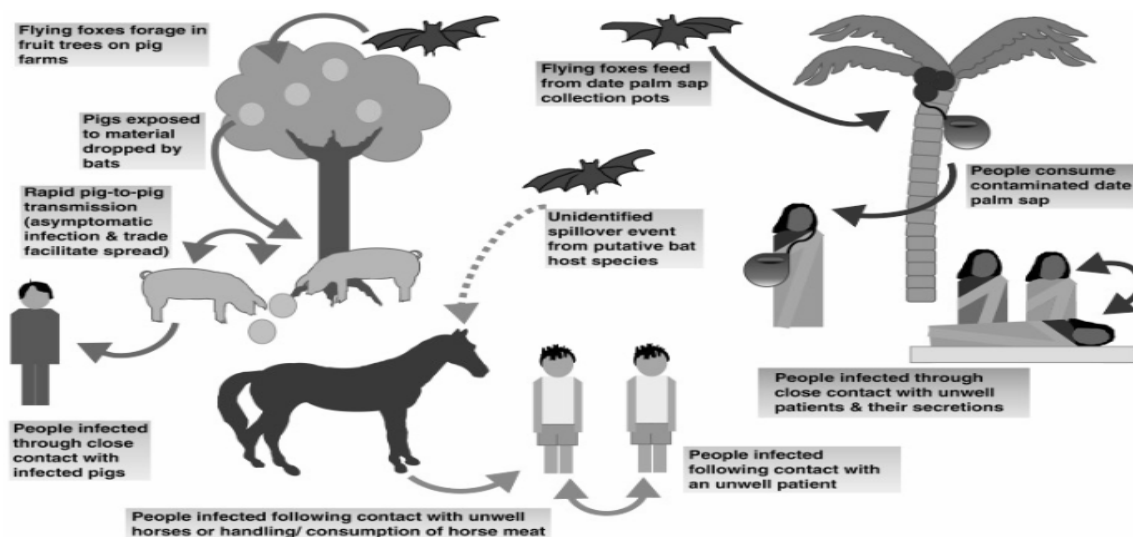
7. **“AYUSH” finds a place in English Language**



The Commission for Scientific and Technical Terminology has decided to adopt the word ‘AYUSH’ in Hindi and English languages for scientific and technical purposes. The “AYUSH” became popular as the acronym for five traditional and complementary systems of medicine, namely Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy and successfully adopted and used in all Government communications. The decision follows a proposal from the Ministry of AYUSH in this regards.

8. **Nipah virus**

- Kerala health department is on high alert in the wake of deaths due to the ‘Nipah’ virus (NiV). The government has set up a task force to monitor the cases and contain the spread of this fast spreading virus which has a reported mortality rate of 70%.
- According to WHO, the Nipah virus infection is a newly emerging zoonosis, that is, a disease transmitted from animals to humans. The virus belongs to a new genus termed Henipavirus (subfamily Paramyxovirinae).
- The natural hosts of the virus are fruit bats belonging to the family Pteropodidae. In 2004, humans were affected after eating the date palm contaminated by infected fruit bats. Pigs can also act as intermediate hosts.
- It was first identified in 1998 at Kampung Sungai Nipah village, Malaysia. The virus is named after this village.
- The symptoms of Nipah are similar to that of influenza: fever, muscle pain, and respiratory problems. Inflammation of the brain can also cause disorientation. Late onset of Encephalitis can also occur. Sometimes a person can have an asymptomatic infection, and be a carrier of Nipah and not show any symptoms.



- Currently, there are no vaccines for both humans and animals. Intensive supportive care is given to humans infected by Nipah virus.
- According to WHO, ribavarin can reduce the symptoms of nausea, vomiting, and convulsions associated with the disease. Individuals infected need to be hospitalised and isolated. Special care should be taken to prevent human-to-human transmission. Surveillance systems should be established to detect the virus quickly and to initiate appropriate control measures.
- The Swadhar scheme was launched by the Union Ministry of Women and Child Development in 2002 for rehabilitation of women in difficult circumstances. The scheme provides shelter, food, clothing and care to the marginalized women/girls who are in need.
- The beneficiaries include widows deserted by their families and relatives, women prisoners released from jail and without family support, women survivors of natural disasters, women victims of terrorist/extremist violence etc.
- The implementing agencies are mainly NGOs. An Evaluation Study conducted through Centre for Market Research and Social Development to assess the performance of the scheme observed that the scheme is successful for which it was formulated/implemented.

WOMEN AND CHILDREN

9. Swadhar Greh Scheme

- Recently released government data shows that there are 559 Swadhar Greh presently functional in the country with 17231 beneficiaries.



10. SHe-box

- It was launched by the Ministry of Women and Child Development. It is an online complaint management system for registering complaints related to sexual harassment at workplace.
- The complaint management system has been developed to ensure the effective implementation of Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act (the SH Act), 2013.
- Once a complaint is submitted to the portal, it will be directly sent to the Internal Complaints Committee (ICC) of the concerned Ministry/Department/PSU/ Autonomous Body etc. having jurisdiction to inquire into the complaint. Through this portal, WCD as well as complainant can monitor the progress of inquiry conducted by the ICC.

11. POSHAN Abhiyaan

- POSHAN Abhiyaan was launched on International Women's day (March 8) in 2018 to boost nutrition among children and women.
- The Abhiyaan targets to reduce stunting, under-nutrition, anemia (among young children, women and adolescent girls) and reduce low birth weight by 2%, 2%, 3% and 2% per annum respectively.

- The target of the mission is to bring down stunting among children in the age group 0-6 years from 38.4% to 25% by 2022.

The annual targets set under POSHAN Abhiyaan beginning 2017-18 are as under:

- Prevent and reduce stunting in children (0-6 years): By 6% @ 2% p.a.
- Prevent and reduce under-nutrition (underweight prevalence) in children (0-6 years): By 6% @ 2% p.a.
- Reduce the prevalence of anemia among young Children (6-59 months): By 9% @ 3% p.a.
- Reduce the prevalence of anemia among Women and Adolescent Girls in the age group of 15-49 years: By 9% @ 3% p.a.
- Reduce Low Birth Weight (LBW): By 6% @ 2% p.a.

12. Stree Swabhiman Initiative

- Ministry of Electronics and Information Technology has announced an initiative by Common Services Centres (CSCs) on women's health and hygiene. The initiative is named 'Stree Swabhiman'.
- 'Stree Swabhiman' aims to create a sustainable model for providing adolescent girls and women an access to affordable sanitary products by leveraging CSCs.
- Under the 'Stree Swabhiman' project, sanitary napkin micro manufacturing units are being set up at CSCs across India, particularly



those operated by women entrepreneurs. The initiative is driven by awareness and personalised outreach by women entrepreneurs who produce and market sanitary napkins themselves.

WATER AND SANITATION

13. Open defecation-free State

- Arunachal Pradesh has emerged as the second State in the Northeast, after Sikkim, to be declared Open Defecation Free.
- The state attained the feat much before the national deadline of October 2, 2019.

14. Swachh Survekshan Awards

It was organized by the Ministry of Housing and Urban Affairs (MoHUA), under the aegis of the Swachh Bharat Mission (Urban), assessed 4203 Urban Local Bodies

Performance of various cities:

Indore has emerged as the cleanest city, followed by Bhopal and Chandigarh. Indore was the cleanest city last year as well.

Jharkhand has been adjudged as the best performing state, followed by Maharashtra and Chhattisgarh.

Cleanest State Capital/UT: Greater Mumbai.

India's 'Cleanest big City': Vijaywada (Andhra Pradesh).

India's Cleanest Small City: New Delhi Municipal Council.

India's Best City in 'Innovation & Best Practices': Ambikapur (Jharkhand).

India's Best City in 'Solid Waste Management': Tirupati (Andhra Pradesh).

SKILL DEVELOPMENT

15. Shram Awards

- The Government has announced the Prime Minister's Shram Awards for the year 2016 to be awarded to 50 workers employed in the Departmental Undertakings & Public Sector Undertakings of the Central and State Governments and Private Sector Units employing 500 or more workers.
- The awards are given in recognition of their distinguished performances, innovative abilities, outstanding contribution in the field of productivity and exhibition of exceptional courage and presence of mind.

There are four types of awards:

Shram Ratna: Rs. Two lakhs and recognition of their contribution to their field (a Sanad).

Shram Bhushan: RS. 100000 and a Sanad.

Shram Vir / Shram Veerangana: RS. 60000 and a Sanad.

Shram Devi / Shram Shree: RS. 40000 and a Sanad.

16. Atal Tinkering Marathon

- Atal Tinkering Labs of the Atal Innovation Mission (AIM) of NITI Aayog, organized an Atal Tinkering Marathon, a six month long nationwide challenge across six different thematic areas, namely, clean energy, water resources, waste management, healthcare, smart mobility and agri-tech.
- Atal Tinkering Labs under the Atal Innovation Mission of NITI Aayog, is based on the philosophy that incentives and prize awards are a great beginning to create an

exponential wave of innovation and entrepreneurship amongst school children.

17. Intellectual Property (IP) mascot – IP Nani

- Mascot IP Nani is a tech-savvy grandmother who helps the government and enforcement agencies in combating IP crimes with the help of her grandson “Chhotu” aka Aditya.
- The IP mascot will spread awareness about the importance of Intellectual Property Rights (IPRs) among people, especially children, in an interesting manner.



This character is also in line with the World Intellectual Property Organization's (WIPO) campaign for the World IP Day which celebrates

the brilliance, ingenuity, curiosity and courage of the women who are driving change in our world and shaping our common future.

3

International Issues

1. Ashgabat agreement

- The Ashgabat Agreement aims to develop a shortest trade route between Central Asian countries and Iranian and Omani ports. The Ashgabat Agreement has Oman, Iran, Turkmenistan and Uzbekistan as founding members. Kazakhstan has also joined this arrangement subsequently. In October 2016, Pakistan also formally joined the Ashgabat Agreement.
- All the four founding members have consented to the accession of India and India's accession to the Agreement will enter into force on February 3, 2018.

Benefits:

- Accession to the Agreement would diversify India's connectivity options with Central Asia and have a positive influence on India's trade and commercial ties with the region.
- It also assumes significance given Beijing's One Belt, One Road (OBOR) initiative of which the China Pakistan Economic Corridor (CPEC), that leads to Gwadar port in Pakistan passing through Pakistan-administered Kashmir, is a major part. India's stand has been that while it is all for connectivity, such initiatives should respect the territorial integrity of other countries.

Ashgabat, known as Poltoratsk between 1919 and 1927, is the capital and the largest city of Turkmenistan in Central Asia, situated between the Karakum Desert and the Kopet Dag mountain range.

2. Port Duqm

India Eyes Strategic Heft Through Duqm



- In an effort to expand its footprint in the Indian Ocean region, India has secured access to the key Port of Duqm in Oman for military use and logistical support. Following this pact, the services of Duqm port and dry dock will be available for maintenance of Indian military vessels. This was one of the key takeaways of Prime Minister Narendra Modi's recent visit to Oman.
- *Trivia:* The Port of Duqm is situated on the southeastern seaboard of Oman, overlooking the Arabian Sea and the Indian Ocean. It is strategically located, in close proximity to the



Chabahar port in Iran. This is also part of India's maritime strategy to counter Chinese influence and activities in the region. The Port of Duqm also has a special economic zone, where about \$1.8 billion investments are being made by some Indian companies.

3. President of Nepal

- Nepal's lawmakers have elected President Bidya Bhandari for a second term.
- Trivia:
- In 2015, she was elected as the first female head of the state.
- An electoral college, including members of parliament and provincial assemblies, will vote in the Presidential election.

4. US places India under watch list

- The United States Treasury Department has put India again on the currency manipulator watchlist as the country's foreign exchange net addition and the bilateral trade surplus with the US have breached two of the three criteria determining manipulation.
- The US Treasury Department uses three parameters to determine a currency manipulator: Bilateral trade surplus with the US to be \$20 billion, current account surplus at 3% of country's GDP, and net purchases of foreign currency to 2% of country's GDP over a year.
- The Treasury report is required by Congress to identify countries that are trying to artificially manage the value of their currency

to gain a trade advantage, for example by keeping the exchange rate low to promote cheaper exports.

5. Weisbaden conference

- Wiesbaden Conference 2018 was recently held in India. Representatives from the 39 countries, as well as experts from the UNSC 1540 Committee and UN Office for Disarmament Affairs in New York, participated in the conference.
- The conference provides an opportunity to participants to share experiences on their export control systems and to identify legal and technical assistance, action plans and challenges in the national implementation of UNSC 1540.
- Trivia: The title of the Conference is 'Securing Global Supply Chains through Government-Industry Partnerships towards Effective Implementation of UNSC Resolution 1540'.
- The Ministry of External Affairs (MEA) in cooperation with Germany and the United Nations Office for Disarmament Affairs (UNODA) hosted the conference.
- Federation of Indian Chambers of Commerce and Industry (FICCI) was the industry partner for the event.



6. Peace Mission 2018

- It is a multi-nation counter-terror exercise that will take place under the framework of Shanghai Cooperation Organisation. The main aim of the exercise will be to enhance counter-terror cooperation among the eight SCO member countries.
- Peace Mission exercises are held once in two years. This year's exercises will be the 10th edition. The last time, it was held in 2016 in Kyrgyzstan.
- The 2018 edition will be held in the Ural Mountains of Russia.
- *Trivia:* It will be for the first time since Independence that India and Pakistan will both be part of a military exercise, though the armies of the two nations have worked together in UN peace keeping missions.

7. Raisina Dialogue 2018

- The 2018 edition of Raisina Dialogue is being held in New Delhi.
- Theme: 'Managing Disruptive Transitions: Ideas, Institutions & Idioms'.
- This is an annual geo-political event, organised by the Ministry of External Affairs and Observer Research Foundation (ORF). It is designed to explore prospects and opportunities for Asian integration as well as Asia's integration with the larger world.

- It is predicated on India's vital role in the Indian Ocean Region and how India along with its partners can build a stable regional and world order.

8. The Pacific Islands Forum

- The Pacific Islands Forum has been granted approval to establish a Permanent Observer Office at the United Nations Office at Geneva (UNOG).
- The Permanent Observer status would entrench the presence of the Blue Pacific region in, and strengthen its links to the United Nations organisations, including its specialised agencies, programmes, fund initiatives and joint programs.
- Pacific Islands Forum, formerly (1971–2000) South Pacific Forum is an organization established in 1971 to provide a setting for heads of government to discuss common issues and problems facing the independent and self-governing states of the South Pacific.
- It comprises of 18 members : Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

4

Environmental Issues

1. Pelican festival



- 'Pelican Bird Festival-2018' was recently organized at Kolleru lake. It was jointly organised by the Andhra Pradesh Tourism Authority (APTA) and Krishna district administration.
- Thousands of pelicans, painted storks and other birds will visit the lake during winter season, roost, breed and fly with their off springs. Recently, officials identified that Atapaka is one of the largest pelicanry in the world.

Kolleru Lake is one of the largest fresh water lakes in the country. It is located between Krishna and Godavari delta. It was declared as a wildlife sanctuary in 1999. It is a Ramsar site and is also listed as an Important Bird Area.

2. CleanSeas campaign

- New Zealand has joined the United Nations-led CleanSeas campaign to rid oceans of plastic. More than 40 other countries have already signed up.

- Scientists estimate that there are over 150 million tonnes of plastics in the ocean today. If nothing changes then plastic in oceans will weigh more than all the fish that live in them by 2050.
- The CleanSeas campaign was launched by the UN Environment in February 2017.
- The campaign aims to engage governments, the general public, civil society and the private sector in the fight against marine plastic by reducing the use of non-recoverable and single-use plastics.



- It addresses the root-cause of marine litter by targeting the production and consumption of non-recoverable and single-use plastic.
- The campaign contributes to the goals of the Global Partnership on Marine Litter, a voluntary open-ended partnership for international agencies, governments, businesses, academia, local authorities and non-governmental organizations hosted by UN Environment.



3. Cuvette Centrale region

- To protect the Cuvette Centrale region in the Congo Basin from unregulated land use and prevent its drainage and degradation, the Democratic Republic of Congo (DRC), the Republic of Congo and Indonesia have jointly signed the Brazzaville declaration that promotes better management and conservation of this globally important carbon store.
- It is the world's largest tropical peatlands in Congo Basin.

Global peatland initiative: The declaration was signed on the sidelines of the Third Partners Meeting of the Global Peatlands Initiative, taking place in Brazzaville, Republic of Congo. The Global Peatlands Initiative is an effort by leading experts and institutions to save peatlands as the world's largest terrestrial organic carbon stock and to prevent it being emitted into the atmosphere.

- Trivia: Peatlands are wetlands that contain a mixture of decomposed organic material, partially submerged in a layer of water, lacking oxygen. The complex biodiversity of the peatlands means they are home to a variety of species, but their high carbon content makes them uniquely vulnerable to incineration if they are drained.

4. World's first microfactory to help tackle e-waste hazard

- An Indian-origin scientist in Australia has launched the world's first microfactory that can transform the components from electronic waste items such as smartphones and laptops into valuable materials for re-use.
- A microfactory is one or a series of small machines and devices that uses patented technology to perform one or more functions in the reforming of waste products into new and usable resources.
- The e-waste microfactory has the potential to reduce the rapidly growing problem of vast amounts of electronic waste causing environmental harm and going into landfill. It can also turn many types of consumer waste such as glass, plastic and timber into commercial materials and products.

5. WHO global air pollution database

- WHO recently released global air pollution database in Geneva. WHO monitored 4,300 world cities for their air pollution levels in terms of PM 2.5 levels in the year 2016. The PM2.5 includes pollutants like sulfate, nitrate and black carbon, which pose the greatest risk to human health.
- As per the database, 14 out of 15 most polluted cities in the world are from India and the top 14 cities are from India only.

- Kanpur is the most polluted city which came on top with PM 2.5 concentration of 173 micrograms per cubic metre.
- Other Indian cities that registered very high levels of PM2.5 pollutants were Kanpur, Faridabad, Gaya, Patna, Agra, Muzaffarpur, Srinagar, Gurgaon, Jaipur, Patiala and Jodhpur followed by Ali Subah Al-Salem in Kuwait and a few cities in China and Mongolia.
- The national Capital climbed down from the fourth spot, where it appeared in WHO 2015 data, to the sixth spot only.

6. First organised census for Indus dolphins



- For the conservation of Indus dolphins, one of the world's rarest mammals, the Punjab government along with WWF-India is conducting the first organised census on their population.
- Indus Dolphins are a blind species that communicates through echo like bats do, Indus dolphins are one of the seven freshwater dolphins found across the world.
- They are found only in India and Pakistan. In Punjab, they are confined to only a 185 km stretch between Talwara and Harike Barrage in India's Beas river in Punjab.

- It is listed by the IUCN as endangered on its red list of threatened species. IUCN suspects the population size of the Indus river dolphins has reduced by more than 50% since 1944.

7. Green licence plates

- The government has approved distinctive green licence plates for electric vehicles to encourage people to use electric vehicles. Such vehicles will be fitted with green licence plates bearing numbers in white fonts for private cars and yellow font for taxis.
- The Government started Faster Adoption and Manufacturing of Hybrid and Electric vehicles (FAME) scheme which provides incentives for purchasing electric vehicle.
- It is a part of the National Electric Mobility Mission Plan. The scheme envisages Rs 795 crore support in the first two fiscals starting with the current year.
- It is being administered by the Heavy Industries Ministry.

8. 'Green Good Deeds' Movement

- Green Good Deeds, the societal movement launched by the Union Minister for Environment, Forest & Climate Change, Dr Harsh Vardhan, to protect environment and promote good living in the country, has found acceptance by the global community.
- The purpose of the people-oriented campaign is to sensitise people and students, in particular about climate change and global warming.

5 *Science and Technology*

1. Super Blue Blood Moon



- Large parts of the globe experienced a rare ‘Super Blue Blood Moon’ on January 31st, 2018. A supermoon, a blue moon and a total lunar eclipse took place at the same time.
- A ‘Super Moon’ is simply a moon that is closer to the Earth than normal. As a result, it appears bigger and brighter in the sky.
- A ‘Blue Moon’ means the second full moon in a calendar month.
- A ‘Blood Moon’ happens when sunlight passes through the atmosphere above the Earth, casting a dark colour across the surface of the moon.

2. LiFi technology

- In a recent pilot project, the ministry of electronics and IT successfully tested a technology called LiFi (Light Fidelity), which uses LED bulbs and light spectrum to transmit

data at speeds as high as 10 GB per second over a 1-km radius. Indications are strong that it will be soon launched in India on a commercial basis.

- The idea is to connect difficult terrains of the country that can’t be reached by fiber but have access to electricity. The technology can be used to connect hospitals where regular internet signals interfere with certain equipment as well as to provide underwater connectivity.
- Li-Fi, or light fidelity, invented by German physicist and professor Harald Haas, is a wireless technology that makes use of visible light in place of radio waves to transmit data at terabits per second speeds—more than 100 times the speed of Wi-Fi.

3. Bomb Cyclone

- A winter storm also known as a “bomb cyclone” has slammed into the northeast United States. The storm has roughly 80 million people along its path, with 22 million of those affected by a coastal flood warning.
- The term is used by meteorologists to indicate a mid-latitude cyclone that intensifies rapidly. A bomb cyclone happens when atmospheric pressure in the middle of the storm drops at least 24 millibars over 24 hours, quickly

increasing in intensity. The lower the pressure, the stronger the storm.



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

4. Geomagnetic storm

- There were reports that Earth will be hit by a massive magnetic storm on March 18. However, National Oceanic and Atmospheric Administration (NOAA) have found that there was no basis for recent reports saying Earth would be hit by a massive geomagnetic storm.
- Geomagnetic storms are caused when events such as solar flares can send higher than normal levels of radiation towards Earth. This radiation interacts with the Earth's magnetic field causing a geomagnetic storm.
- Effects from the geomagnetic storm can range from the appearance of auroras or the northern and southern lights to disruptions in

communications systems due to high radiation. This would make it difficult to communicate with others on Earth.

5. Copernicus programme

- India has joined Europe's mega global arrangement of sharing data from Earth observation satellites, called Copernicus.
- Under this arrangement, the European Commission intends to provide India with free, full and open access to the data from the Copernicus Sentinel family of satellites using high bandwidth connections.
- Copernicus is the most ambitious Earth observation programme to date. It will provide accurate, timely and easily accessible information to improve the management of the environment, understand and mitigate the effects of climate change and ensure civil security.
- Trivia: Copernicus is the new name for the Global Monitoring for Environment and Security programme, previously known as GMES.
- This initiative is headed by the European Commission (EC) in partnership with the European Space Agency (ESA).

6. Point Nemo

- The Tiangong-1 Space Station Just Missed Point Nemo, The Spacecraft Graveyard In The Pacific Ocean
- The Chinese space station known as Tiangong-1 has finally fallen to Earth, and it



just missed a spot in the Pacific Ocean that would have been its perfect resting place.

- Scientists were initially planning to push the Tiangong-1 satellite to Point Nemo. However, they could not do so as they lost control of it. China's defunct Tiangong-1 space lab mostly broke up on re-entering the Earth's atmosphere above the South Pacific.

Point Nemo, or "ocean point of inaccessibility," is a region in the South Pacific that is the loneliest place on the planet. It is used as a graveyard for controlled re-entries and a place where space junk can be dropped safely.

7. NAAMES Mission

- In a first, NASA is conducting a study of the world's largest phytoplankton bloom in the North Atlantic, named the North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) mission, to see how the tiny sea critters influence the climate in every season.
- It is the first research mission to conduct an integrated study of all four distinct phases of the world's largest phytoplankton bloom.

8. BeiDou

- China has sent twin satellites into space on a single carrier rocket, as part of efforts to enable its BeiDou system to provide navigation and positioning services to countries along the Belt and Road by the end of 2018.

- This is the first launch of the BeiDou satellites in 2018. The twin satellites are coded the 26th and 27th satellites in the BeiDou Navigation Satellite System (BDS).

9. National Technology Day 2018

- Since 1999, May 11 is celebrated as National Technology Day to mark India's technological advancements.

National Technology Day 2018 theme: "Science and Technology for a Sustainable Future".

- Trivia: On May 11, 1998, India detonated three nuclear bombs in the Indian Army's Pokhran Test Range. Dr APJ Abdul Kalam lead the Indian team of scientists to successfully test-fire the Shakti-1 nuclear missile at Rajasthan's Pokhran test range.

10. Magnetospheric Multiscale spacecraft (MMS)

- In a new find, NASA scientists have discovered a new type of magnetic event in turbulent space surrounding Earth. Scientists analysed the data obtained by the NASA's Magnetospheric Multiscale spacecraft (MMS) to find the new magnetic event in near-Earth environment.
- Magnetic reconnection is one of the most important processes in the space — filled with charged particles known as plasma — around Earth. This fundamental process dissipates magnetic energy and propels charged particles, both of which contribute to a



dynamic space weather system that scientists want to better understand, and even someday predict, as we do terrestrial weather.

Reconnection occurs when crossed magnetic field lines snap, explosively flinging away nearby particles at high speeds.



6

Defence

1. Paschim Leher (XPL-18)

- The Western Naval Command of the Indian Navy concluded a large scale operational exercise in the Arabian Sea. The three week long exercise termed Exercise ‘Paschim Leher’ (XPL), tested the operational readiness of the Western Naval Command and the execution of its operational plans.
- The XPL 2018 enabled testing and revalidation of operational plans and manoeuvres in a hostile maritime scenario on India’s Western Seaboard. The exercise will enable further refine the operational, logistics and administrative plans of the Western Naval Command.

2. Bhabha Kavach

- It is an armour panel developed by BARC which gives personal protection against bullets of different threat levels.
- Bhabha Kavach made up of BARC Nano-Sheets are lighter in weight with reduced trauma level with respect to the existing jackets.
- The jacket is made using extremely hard boron carbide ceramics that is hot-pressed with carbon nano-tubes and composite polymer.

1. Geospatial world excellence award

- Odisha has bagged Geospatial World Excellence Award 2018 for successful IT application on tracking of mineral production, dispatch and value accrued on real time basis through its website based software.
- Geospatial World Awards is an internationally-acclaimed private award recognizing exemplary innovations and practices in the global geospatial industry. With the ceremony taking place at Geospatial World Forum every year, Geospatial World Awards have recognized over 150+ individuals and organizations till date.

2. Janadriyah festival

- Saudi is celebrating the annual Janadriyah festival. India is this year's guest of honor.
- Janadriyah is the annual national heritage and culture festival named after the village on the northern outskirts of Riyadh. The festival encourages Saudis to celebrate their heritage and to bolster cultural exchange.

3. Kambala

- The President has approved the Prevention of Cruelty to Animals (Karnataka Amendment) Bill making Kambala a legal rural sport in Karnataka. With this, all apprehensions and obstacles that were preventing kambala have been cleared.

- Trivia: Kambala in its traditional form is non-competitive with buffalo pairs made to race one after another in paddy fields, which is considered a thanksgiving to the Gods for protecting the animals from diseases.

4. 2018 Pritzker prize

- Balkrishna Doshi is the newest winner of the Pritzker Architecture Prize, known as the Nobel for architects. He has built more than a hundred buildings that reflect his investment in local materials, social change and the environment. He is the first Indian to receive the award.
- Trivia: The international prize, which is awarded each year to a living architect/s for significant achievement, was established by the Pritzker family of Chicago through their Hyatt Foundation in 1979. It is granted annually and is often referred to as "architecture's Nobel" and "the profession's highest honor." The award consists of \$100,000 (US) and a bronze medallion. The award is conferred on the laureate/s at a ceremony held at an architecturally significant site throughout the world.



5. World's longest sandstone cave

- Meghalaya is now also home to the longest sandstone cave in the world at 24,583m.
- Trivia: The cave system has fossils of dinosaurs, especially the Mosasaurus, a giant reptile that lived 66-76 million years ago.
- The cave in Meghalaya is 6,000m longer than the current listed sandstone cave in the world, Cueva El Samán, (18,200m) in Venezuela.

6. Protected area permit

- The Union Home Ministry is planning to relax the protected area permit (PAP) regime to enable foreign tourists to access border areas. The permit is being relaxed by the Centre following several requests by Arunachal Pradesh, Himachal Pradesh, Sikkim, Uttarakhand, Nagaland, Manipur and the Tourism Ministry.
- Under the Foreigners (Protected Areas) Order, 1958, all areas falling between the Inner line and the International Border of some states have been declared as protected areas.
- The protected areas currently include whole of Arunachal Pradesh, Manipur, Mizoram, Nagaland and Sikkim, besides parts of Himachal Pradesh, Rajasthan, Uttarakhand and Jammu and Kashmir. Some parts of Sikkim fall under the protected area regime while others under the restricted area.

7. Enemy properties

- The government has initiated the process of sale of more than 9,400 enemy properties by issuing guidelines and directing the office of the custodian to submit the list of all such movable and immovable assets within three months. The sale of enemy properties is expected to fetch around Rs 1 lakh crore for the government exchequer.
- The move comes after the amendment of the Enemy Property (Amendment and Validation) Act 2017 and the Enemy Property (Amendment) Rules, 2018, which ensured that the heirs of those who migrated to Pakistan and China during partition and afterwards will have no claim over the properties left behind in India.
- The properties of enemies in India were classified as enemy property. The properties included land, buildings, shares held in companies, gold and jewellery of the citizens of enemy countries. The responsibility of the administration of enemy properties was handed over to the Custodian of Enemy Property, an office under the central government.

8. Kadaknath

- Madhya Pradesh has won the Geographical Indication (GI) tag for Kadaknath, a black-feathered chicken known for its flavourful meat. The GI tag will ensure that no one else can use the name Kadaknath while selling any

other black chicken and will also translate into higher prices for producers.



- It is found mainly in the tribal district of Jhabua.
- Kadaknath is in demand not only because of its taste but also due to its low cholesterol and high protein content.

9. Walmiki and Malhar

- Researchers have discovered two new languages- Walmiki and Malhar.
- The languages are categorised 'endangered' as the number of people speaking is small. These languages are spoken in Andhra Pradesh and Odisha. Only a few people living in the forest and hilly areas speak these languages.
- Trivia: Walmiki is spoken in Koraput of Odisha and on the bordering districts of Andhra Pradesh. Walmiki is an isolate language i.e. it does not belong to a family of languages. The name of the language is also interesting and indicative because the speech

community claims descent from the great Indian saint-poet Valmiki.

- Malhar is spoken in a remote and isolated hamlet which is almost 165 km from Bhubaneswar. The community consists of about 75 speakers including children. It belongs to the North Dravidian subgroup of the Dravidian family of languages and has close affinities with the other North Dravidian languages like Malto and Kurux spoken in West Bengal, Jharkhand and Bihar.

10. World heritage day

- Every year, 18th April is celebrated worldwide as World Heritage Day to create awareness about Heritage among communities.

2018 theme: Heritage for Generations.

- A World Heritage site is classified as a natural or man-made area or a structure that is of international importance, and a space which requires special protection. These sites are officially recognised by the UN and the United Nations Educational Scientific and Cultural Organisation, also known as UNESCO. UNESCO believes that the sites classified as World Heritage are important for humanity, and they hold cultural and physical significance.

11. Adilabad Dokra and Warangal Durries

Two craft forms that are unique to Telangana were recently granted the Geographical Indication (GI) tag by the GI registry in Chennai.

Adilabad Dokra:

- It is an ancient metal craft that is popular in the state's tribal regions.
- The uniqueness of this art form is that no two sculptures are the same, as they are not made out of a pre-designed cast.
- The craftsmen of this art form belong to the Woj community, commonly referred to as Wojaris or Ohjas in the rural areas of Telangana.



- They use brass as their main material and an ancient casting technique called 'cire perdue'. As part of this technique, the craftsmen use clay and design a model of the sculpture that they want to create. They wrap the clay with wax threads before baking the mould, so that the wax melts away and the molten metal is poured into the mould.

- The common items made by the craftsmen include small idols and statues of tribal deities, jewellery, bells, small-scale animal sculptures and others.

Warangal durries:

In this style of durries, weavers create beautiful patterns and dye them using vegetable colours, which are washed in flowing water after the printing process.



Warangal district became a renowned hub for weaving these rugs due to the availability of cotton, which is grown by farmers in the area.

Highlights of Budget 2018-19

Agriculture:

- Budget allocation for the agriculture ministry increased by 13 percent to Rs 58,080 crore for 2018 -19 fiscal, from Rs 51,576 crore in 2017-18.
- Big hike in Minimum Support Price or MSP for Kharif crops, 1.5 times of the production cost.
- 22,000 rural haats to be developed and upgraded into Gramin Agricultural Markets(GrAMs) to protect the interests of 86% small and marginal farmers. These GrAMs, electronically linked to e-NAM will provide farmers facility to make direct sale to consumers and bulk purchasers.
- Launch of Operation Greens on the lines of Operation Flood with budgetary outlay of Rs. 500 crores. To address the challenge of price volatility of perishable commodities like tomato, onion and potato with the satisfaction of both the farmers and consumers.
- The Finance Minister described Bamboo as 'Green Gold' and re-structured National Bamboo Mission with an outlay of Rs.1290 crore to promote bamboo sector in a holistic manner.

Animal Husbandry, Dairy and Fisheries:

- Two New Funds of Rs10,000 crore announced for Fisheries and Animal Husbandry sectors;
- Launch of "Pradhan Mantri Kisan Sampada Yojana" to modernise supply chain infrastructure in the agricultural sector.
- Budget allocation doubled under the Krishi Sampada Yojana to push the Food processing industry.
- In the fisheries sector; restructured the scheme by merging all the ongoing schemes under an umbrella of "Blue Revolution".
- 'Dairy Processing Infrastructure Development Fund' with a corpus of Rs. 10,881 crore is being set up.
- National Kamdhenu Breeding centre being established in Madhya Pradesh & Andhra Pradesh to conserve all Bovine Breeds.

Education:

- Setting up of "Ekalavya Model Residential School" on par with Navodaya Vidyalayas to provide the best quality education to the tribal children in their own environment by 2022 in every block.
- To intensify investments in research and related infrastructure in premier educational institutions, including health institutions, a major initiative named "Revitalising

Infrastructure and Systems in Education (RISE) by 2022” with a total investment of Rs.1,00,000 crore in next four years was announced.

- “Prime Minister’s Research Fellows (PMRF)” Scheme: under this, 1,000 best B.Tech students will be identified each year from premier institutions and provide them facilities to do Ph.D in IITs and IISc, with a handsome fellowship.

Health:

- The world’s largest government funded health care programme titled “National Health Protection Scheme” announced to cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.

Science and Technology:

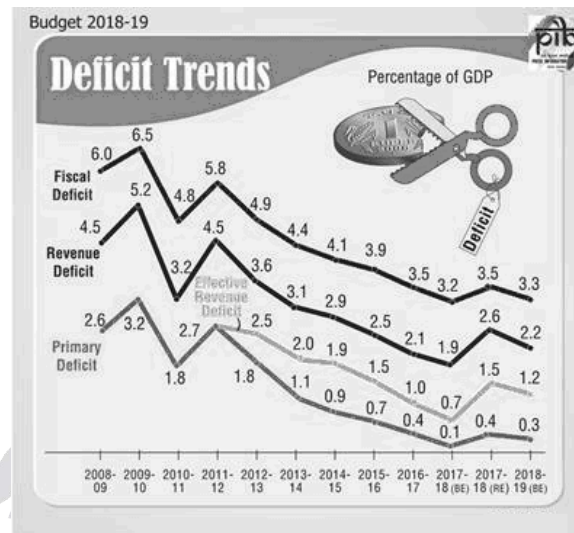
- Department of Science & Technology will launch a Mission on Cyber Physical Systems to support establishment of centres of excellence for research, training and skilling in robotics, artificial intelligence, digital manufacturing, big data analysis, quantum communication and internet of things.

- NITI Aayog to initiate a national programme on Artificial Intelligence(AI)

Finance:

- Three Public Sector Insurance companies- National Insurance Co. Ltd., United India Assurance Co. Ltd., and Oriental India insurance Co. Ltd., will be merged into a single insurance entity.
- A comprehensive Gold Policy will be formulated to develop gold as an asset class.
- Deduction of 30 percent on wages paid to new employees to be relaxed to 150 days for footwear and leather industry, to create more employment.
- Increase in deduction limit for medical expenditure for certain critical illness from Rs. 60,000 (in case of senior citizens) and from Rs. 80,000 (in case of very senior citizens) to Rs. 1 lakh for all senior citizens.
- Proposal to introduce tax on distributed income by equity oriented mutual funds at the rate of 10 percent.
- Proposal to increase cess on personal income tax and corporation tax to 4 percent from present 3 percent.

Budget Deficits:



Rupee Comes From and Goes To:

