

GOVERNANCE- WELFARE SCHEMS, E-GOVERNANCE, SERVICES ETC.**Institutes of Eminence Scheme**

The University Grants Commission has deferred a decision on which institutions should be granted the prestigious Institutes of Eminence tag as an expert committee has recommended more names than the government scheme allowed for.

Background: The empowered expert committee headed by former Chief Election Commissioner N. Gopalaswami had initially recommended 11 institutions for the tag in July 2018. In December, the committee recommended 19 more names, taking the total list to 30.

Institutions of Eminence scheme:

- The institutes of eminence scheme under the Union Human Resource Development (HRD) ministry aims to project Indian institutes to global recognition.
- The selected institutes will enjoy complete academic and administrative autonomy.
- The government will run 10 of these and they will receive special funding.
- The selection shall be made through challenge method mode by the Empowered Expert Committee constituted for the purpose.
- Eligibility: Only higher education institutions currently placed in the top 500 of global rankings or top 50 of the National Institutional Ranking Framework (NIRF) are eligible to apply for the eminence tag.
- The private Institutions of Eminence can also come up as greenfield ventures provided the sponsoring organisation submits a convincing perspective plan for 15 years.

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**International Year of the Period Table of Chemical Elements**

UNESCO has declared 2019 as the International Year of the Period Table of Chemical Elements to commemorate the 150th birthday of the periodic table of chemical elements. The Periodic table of the Chemical elements was first published by Russian scientist Dmitry Mendeleev in the year 1869.

Periodic Table of Chemical Elements:

The Periodic Table of Chemical Elements is the tabular arrangement of the chemical elements, arranged by atomic number, electron configuration, and recurring chemical properties. The important features of the periodic table are:

- The seven rows of the table are called as periods and generally accommodate metals on the left and non-metals on the right.
- The columns of the table are called groups and contain elements with similar chemical behaviours.
- The elements from atomic numbers 1 (hydrogen) to 118 (oganesson) have been discovered in nature or synthesized in laboratories.
- The first 98 elements listed in the periodic table occur naturally, though some are found only in trace amounts and a few were discovered in nature only after having first been synthesized.
- Elements from 99 to 118 have only been synthesized in laboratories or nuclear reactors.
- Efforts are on to elements having higher atomic numbers these elements would begin the eighth row, and theoretical work has been done to suggest possible candidates for this extension.
- To celebrate the International Year of the Period Table of Chemical Elements the UNESCO would be organising events like online competition to test high school students' knowledge of the table, and scientific experiments brought to schools around the world.

Digital currency: Aber

The central banks of the UAE and Saudi Arabia will launch a common digital currency called Aber. Aber will be used for financial settlements between the two countries through Blockchains and Distributed Ledgers technologies.

Benefits of the Digital Currency

- The digital currency would aid in studying the impact on the improvement and reduction of remittance costs and the assessments of risks.
- Aber will establish an additional means for the central financial transfer systems of the two countries and enable banks to directly deal with each other in conducting financial remittances.
- Initially, the use of the digital currency will be restricted to a limited number of banks. By studying the various technical, economic and legal requirements, the use of the digital currency would be expanded.
- Digital Currency Aber relies on the use of a distributed database between the central banks and the participating banks from both sides.
- Digital Currency is part of the efforts to adopt new technologies like Blockchain, Artificial Intelligence, Internet of Things, etc., in line with the Fourth Industrial Revolution that is reshaping governments and corporates around the world

Corruption Perceptions Index 2018

The 2018 Corruption Perceptions Index (CPI) has been released by Transparency International. The index ranks the countries by their perceived levels of public sector corruption according to experts and business people. It uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean.

The CPI 2018

- It reveals that the continued failure of most countries to significantly control corruption is contributing to a crisis of democracy around the world.
- More than two-thirds of countries score below 50, with an average score of only 43.
- Denmark and New Zealand top the Index with 88 and 87 points, respectively.
- Somalia, South Sudan, and Syria are at the bottom of the index, with 10, 13 and 13 points, respectively.
- The highest scoring region is Western Europe and the European Union, with an average score of 66, while the lowest scoring regions are Sub-Saharan Africa (average score 32) and Eastern Europe and Central Asia (average score 35).

India Position

- India has been ranked at 78th place out of 180 countries in 'Corruption Perception Index' (CPI) released by Transparency International in 2018 against 81st in the Year 2017.
- India marginally improved its score to 41 (from 40 in 2017).

INDIAN ECONOMY

FMCG sector Growth

The Fast Moving Consumer Goods (FMCG) industry is expected to clock double digit growth in the current year, though the growth is likely to be lower than that of the previous year, which saw the sector benefit from the overall health of the economy and lower inflation. Consumption growth in 2018 was led by favourable macros like growth in GDP, lower inflation and manufacturers passing on the benefits of margin expansion from the GST regime.

Overview of FMCG sector: Fast-moving consumer goods (FMCG) sector is the 4th largest sector in the Indian economy with Household and Personal Care accounting for 50% of FMCG sales in India. Growing awareness, easier access and changing lifestyles have been the key growth drivers for the sector.

Investments/ Developments: The government has allowed 100% Foreign Direct Investment (FDI) in food processing and single-brand retail and 51% in multi-brand retail. This would bolster employment and supply chains, and also provide high visibility for FMCG brands in organised retail markets, bolstering consumer spending and encouraging more product launches.

Major initiatives taken by the government to promote the FMCG sector

- Consumer Protection Bill with special emphasis on setting up an extensive mechanism to ensure simple, speedy, accessible, affordable and timely delivery of justice to consumers.

- The Goods and Services Tax (GST) is beneficial for the FMCG industry as many of the FMCG products such as Soap, Toothpaste and Hair oil now come under 18 per cent tax bracket against the previous 23-24 per cent rate.
- The GST is expected to transform logistics in the FMCG sector into a modern and efficient model as all major corporations are remodeling their operations into larger logistics and warehousing.

NSDC pact with Renault-Nissan:

Renault-Nissan has signed a pact with National Skill Development Corporation to train its workforce in the alliance plant in Chennai for future technologies. NSDC would assist the Renault-Nissan workforce develop competency standards in emerging manufacturing technologies.

NSDC:

- National Skill Development Corporation India (NSDC), established in 2009, is a not-for-profit company set up by the Ministry of Finance.
- NSDC was set up by Ministry of Finance as Public Private Partnership (PPP) model. The Government of India through Ministry of Skill Development & Entrepreneurship (MSDE) holds 49% of the share capital of NSDC, while the private sector has the balance 51% of the share capital.
- NSDC aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions.
- It also provides funding to build scalable and profitable vocational training initiatives.
- Its mandate is also to enable support system which focuses on quality assurance, information systems and train the trainer academies either directly or through partnerships.
- It also develops appropriate models to enhance, support and coordinate private sector initiatives.

ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES

First Captive Elephant Survey

The details of the first survey of captive elephants in the country were submitted in an affidavit by the MoEFCC to the Supreme Court. The affidavit comes in the wake of rising elephant deaths and human-elephant conflicts, particularly in Kerala and Assam.

According to the affidavit, there are 2,454 elephants in captivity, of which 560 are in possession with forest departments and 1,687 with private individuals. However, 664 of the total captive elephants in the country are without ownership certificate while there are 85 in zoos, 26 in circuses and 96 in temples.

Statewise Details

- The affidavit covers data for 28 states and Union Territories.
- It shows that Assam and Kerala account for more than half the nationwide total of 2,454.
- Assam has 37% of these captive elephants and Kerala has 21%.
- Concentration in two states means a wide gap with the count in other states — the third highest is Karnataka's 184, roughly one-fifth of Assam's 905 and a little over one-third of Kerala's 518.
- Of these, one-third are in private custody without any ownership certificate mandated by law; zoos, circuses and temples account for 207 elephants in captivity.

Why such Survey?

- In Nov 18, the Court had pulled up the Animal Welfare Board of India (AWBI) for not having data on the number of elephants held captive.
- The apex court had directed the MoEFCC to identify elephants in captivity and whether their owners have an ownership certificate.
- It was hearing a writ petition filed by Wildlife Rescue and Rehabilitation Centre.
- The bench has now directed the Chief Wildlife Wardens of states to ascertain the age of all the captive elephants.

The IEA's Report - "The Future of Rail"

Ministry of Railways & Coal launched "The Future of Rail" report of International Energy Agency (IEA).

- It is the first-of-a-kind report analyses the current and future importance of rail around the world through the perspective of its energy and environmental implications.
- The report reviews the impact of existing plans and regulations on the future of rail and explores the key policies that could help to realise an enhanced future rail.
- The report has a focus on India, elaborating on the unique social and economic role of rail in India, together with its great enduring potential, to show how India can extend and update its networks to harness rail at a scope and scale that is unparalleled.

International Energy Agency

- It is an inter-governmental organisation that works to ensure reliable, affordable and clean energy for its 30 member countries and 8 association countries.
- Its secretariat is in Paris.
- It was established in the framework of the Organisation for Economic Co-operation and Development (OECD) in 1974 in the wake of the 1973 oil crisis.
- Its mission is guided by four main areas of focus:
 - Energy security
 - Economic development
 - Environmental awareness
 - Engagement worldwide.

**SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE
ETC****Project Cosmic Microwave Background-Bharat**

CMB stands for Cosmic Microwave Background, and the scientific space project CMB-Bharat has been presented as a proposal to ISRO and is under consideration. In the workshop, project CMB-Bharat, which could help us listen to the faintest murmurs of the early universe, was discussed.

CMB-Bharat

CMB-Bharat is a proposal for comprehensive next generation Cosmic Microwave Background (CMB) mission in international collaboration with major Indian contribution. This referred to quantum gravitational waves, which are different from what LIGO detectors had observed that were classical in nature.

- The cosmic microwave background (CMB) is thought to be leftover radiation from the Big Bang, or the time when the universe began.
- As the theory goes, when the universe was born it underwent a rapid inflation and expansion.
- The universe is still expanding today, and the expansion rate appears different depending on where you look.
- The CMB represents the heat left over from the Big Bang.
- We can't see the CMB with your naked eye, but it is everywhere in the universe.
- It is invisible to humans because it is so cold, just 2.725 degrees above absolute zero (minus 459.67 degrees Fahrenheit, or minus 273.15 degrees Celsius.)
- This means its radiation is most visible in the microwave part of the electromagnetic spectrum.