

# CURRENT AFFAIRS

JUNE 2019

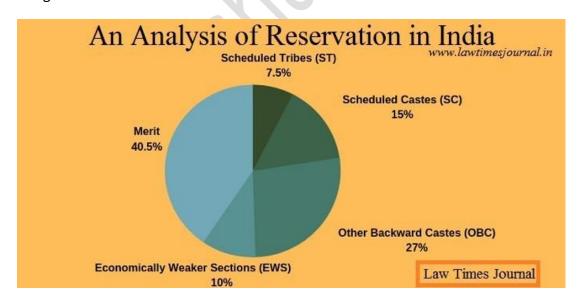
# **POLITY & GOVERNANCE**

# 1. SC UPHOLDS KARNATAKA LAW GRANTING RESERVATION

### CONTEXT

Recently, the Supreme Court upheld the constitutional validity of the Karnataka Extension of Consequential Seniority to Government Servants Promoted on the Basis of Reservation Act, 2018.

- The judgement underlines that "a 'meritorious' candidate is not merely one who is 'talented' or 'successful' but also one whose appointment fulfils the constitutional goals of uplifting members of the SCs/STs and ensuring a diverse and representative administration".
- Providing of reservation for SCs and STs is not at odds with the principle of meritocracy. Merit must not
  be limited to narrow and inflexible criteria such as one's rank in a standardised exam, but rather must
  flow from the actions a society seeks to reward, including the promotion of equality in society and
  diversity in public administration.
- Article 335 recognises that special measures need to be adopted for considering the claims of SCs and STs in order to bring them to a level – playing field. Centuries of discrimination and prejudice suffered by the SCs/STs pose real barriers of access to opportunity.
- The Constitution mandates realisation of substantive equality in the engagement of the fundamental rights with the directive principles, inclusion, together with the recognition of the plurality and diversity of the nation constitutes a valid constitutional basis for defining efficiency.
- If efficiency is grounded in exclusion, it will produce a pattern of governance which is skewed against the marginalised.



### **BACKGROUND**

In Indra Sawhney case (1993), the Supreme Court has held that reservations under Article 16 (4) of the Constitution could only be provided at the time of entry into government service and not in matters of promotion. <u>In 1995, Parliament adopted the 77<sup>th</sup> Amendment by which clause (4A) was inserted into Article 16 to enable reservation to be made in promotion for Scheduled Castes (SCs) and Scheduled Tribes (STs).</u>

The validity of this amendment and of <u>the legislation enacted in its pursuance was challenged</u> before the Supreme Court in the Nagaraj case (2006).

# **CONCLUSION**

The Supreme Court upheld the constitutional validity of these amendments and ruled that, In order to make provision for reservation in promotions for SCs/STs, the State has to collect quantifiable data showing backwardness of the class and inadequacy of its representation. It will also have to see that the reservation provision does not breach he ceiling-limit of 50%.

# 2. SUPREME COURT VACATES STAY ON RETROSPECTIVE APPLICABILITY OF BLACK MONEY LAW

### **CONTEXT**

The Supreme Court (SC) recently vacated a stay, put by the Delhi High Court, on the retrospective applicability of Black Money (Undisclosed Foreign income and Assets) and Imposition of Tax Act, 2015.

### HIGHLIGHTS IN THE NEWS

- The Act was enacted in 2015. It was mentioned in the Act that it will come into effect from April 1, 2016. However, in July 2015, the government issued a notification changing the date if commencement of the Act to July 1, 2015.
- The Delhi High Court order had held that the 2016 black money law cannot be allowed to operate with retrospective effect from July 2015.

# BLACK MONEY (UNDISCLOSED FOREIGN INCOME AND ASSETS) AND IMPOSITION OF TAX ACT, 2015

The Act penalises the concealment of foreign income and provides for criminal liability for attempting to evade tax in relation to foreign income. The Act gave a one-time opportunity to Indian residents to declare undisclosed foreign income and assets. The concerned person had to pay tax at the rate of 30% and an equal amount by way of penalty if found having undisclosed overseas wealth.

# 3. STATE UNDER ARTICLE 12 OF THE CONSTITUTION

### CONTEXT

Recently, the Delhi High Court has given judgement in Sanjaya Bahel case, that the United Nations is not a 'State' within the meaning of Article 12 of the Constitution of India and is not amenable under the jurisdiction for the Court under Article 226 of the Constitution.

### HIGHLIGHTS IN THE NEWS

- Part III (Article 12 to Article 35) consists of a list of Fundamental Rights.
- In order to safeguard the rights and freedom of individuals it needs constitutional protection from the acts of the State Itself.
- According to **Article 12** 'the State' Includes the Government and Parliament of India and the Government and the Legislature of each of the States and all local or **other authorities** within the territory of India or under the control of the Government of India.

# Schedules 1 to 12

First schedule contains the list of states and union territories and their territories

Second schedule contains provisions as to the President, Governors of States, Speaker and the Deputy Speaker of the House of the People and the Chairman and the Deputy Chairman of the Council of States and the Speaker and the Deputy Speaker of the Legislative Assembly and the Chairman and the Deputy Chairman of the Legislative Council of a State, the Judges of the Supreme Court and of the High Courts and the Comptroller and Auditor-General of Indiathe list of states and union territories and their territories

Third Schedule contains the Forms of Oaths or Affirmations.

Fourth Schedule contains provisions as to the allocation of seats in the Council of States.

Fifth Schedule contains provisions as to the Administration and Control of Scheduled Areas and Scheduled Tribes.

Sixth Schedule contains provisions as to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram.

Seventh Schedule contains the Union list, State list and the concurrent list.

Eighth Schedule contains the list of recognised languages.

Ninth Schedule contains provisions as to validation of certain Acts and Regulations.

Tenth Schedule contains provisions as to disqualification on ground of defection.

Eleventh Schedule contains the powers, authority and responsibilities of Panchayats.

Twelfth Schedule contains the powers, authority and responsibilities of Municipalities.

### **BACKGROUND**

Dispute and discussion around the phrase' other authorities' of Article 12 has evolved over time. Earlier, a restrictive interpretation was given to this term, i.e. the authorities exercising governmental or sovereign function would only be covered under other authorities.

The liberal interpretation says that it is not necessary for an authority to be engaged in sovereign or governmental function to come under the definition of the state. The bodies like State Electricity Boards, LIC, ONGC and IFC also come under 'other authorities'.

In R.D Shetty case Justice P.N Bhaqwati gave **5 Point test** to determine whether a body is an agency or instrumentality of the state:

- 1. Financial assistance given by the State and magnitude.
- 2. Any other forms of assistance whether of the usual kind or extraordinary.
- **3.** Control of management and policies of the corporation by the State nature and extent of control.
- **4.** The functions have public importance.
- 5. State conferred or State protected monopoly status.

# 4. MADRAS HIGH COURT ON POWERS OF PUDUCHERRY LG

# CONTEXT

Recently, the Madras High Court ruled that the Lieutenant – Governor (L-G) of Puducherry could not interfere with the day-to-day administration of the Union Territory when an elected government was in place.

- The Court said incessant interference from the L-G would amount to running a 'parallel government'.
- Further, the court observed that the Central government as well as L-G should be true to the
  concept of democratic principle of Separation of Power. Otherwise, the constitutional
  scheme of the country of being democratic and republic would be defeated.



### **BACKGROUND**

Articles 239 and 239 AA of the Constitution, as well as the Government of National Capital Territory of Delhi Act, 1991, clearly underline that the role of Centre is more prominent in the UT of Delhi, where the L-G is the eyes and ears of the Centre. The manner in which the L-G functions vis-a-vis the elected government (Council of Ministers) is also spelt out in the Rules of Business of the Government of Pondicherry 1963.

In an earlier Judgement the Supreme Court has clarified that the L-G of Delhi has no independent decision — making power' and has to act on the aid and advice of the elected government. The Court also said that the L-G must work 'harmoniously' with the ministers.

### CONCLUSION

According to the Court, there are significant differences in the powers conferred on the legislatures of Puducherry and Delhi under Articles 239 A and 239 AA of the Constitution. The L-G of Delhi enjoys greater powers than the L-G of Puducherry. The L-G of Delhi is vested with 'Executive Functions' that enable him to exercise powers in matters connected to public order, police and land. The Delhi Assembly has the power to legislate on all subjects except law & order and land. Whereas the Puducherry Assembly can legislate on any issue under the Concurrent and State Lists.

# 5. NUMBER OF JUDGES IN THE SUPREME COURT

### **CONTEXT**

Recently, the government has cleared the names of four judges for their elevation to the Supreme Court (SC). The names were recommended by the Collegium.

- The elevation of the four judges makes the Supreme Court reach the full sanctioned strength of 31 judges (including the Chief Justice).
- The Constitution enacted in 1950 envisaged a Supreme Court with a Chief Justice and 7 puisne Judges. It empowered the **Parliament** to increase this number.
- As the work of the Court increased and arrears of cases began to accumulate, Parliament increased the number of Judges to 11 in 1956, 14 in 1960, 18 in 1978 and 26 in 1986.
- In February 2009, the number of Supreme Court judges was increased to 31, including the Chief Justice of India.
- However, the strength was rarely full due to the following reasons:
- Difficulty in finding judges

• Due to the mandatory retirement ages the High court judges retire at the age of 62, and Supreme Court Judges at 65. Low retirement ages create short tenures and frequent vacancies.

# **WHAT IS COLLEGIUM SYSTEM?**

The Collegium system is a system under which appointments/elevation of judges to the Supreme Court and transfers of judges of the High Courts are decided by a forum of the Chief Justice of India and the four senior-most judges of the Supreme Court.

The Collegiums system of appointment of judges finds its genesis from the *Three Judges case, 1998.* The Central Government may require the Collegium to reconsider these recommendations only once. This is because if the collegiums recommends the names for the second time it becomes binding on the Central Government.

# 6. REJECTION OF CANDIDATURE IN ELECTION

# **CONTEXT**

The Returning Officer of Varanasi recently rejected the nomination of a sacked Border Security Force (BSF) constable on grounds that he did not submit proper documents.

### HIGHLIGHTS IN THE NEWS

- The nomination was rejected as it failed to meet the requirements under section 9 and 33(3) of the Representation of the People Act, 1951.
- Under these, if a person is dismissed from government service and five years have not elapsed, then such a person shall not be nominated as a candidate unless his nomination paper is accompanied by a certificate issued by the Election Commission that he has not been dismissed for corruption or disloyalty to the state.

# **Grounds for rejection of candidature**

- ✓ Nomination paper of a candidate shall be rejected if :
- ✓ He is disqualified on the date fixed for scrutiny of nomination;
- ✓ Nomination paper is not signed by candidate or subscribed by requisite number of proposers
- ✓ Requisite security deposit has not been made.
- ✓ Age or complete address of candidate has not been mentioned in nomination paper
- ✓ Nomination paper shall not be rejected on grounds of defects which is not of substantial character, like, defect in declaration relating to symbol etc.

# 7. SANCTION OF PROBES FOR CENTRAL GOVERNMENT EMPLOYEES

### CONTEXT

According to the new Government order, Department of Personnel and Training (DoPT) will now be the final authority in case any central government department, ministry or the Central Vigilance Commission (CVC) refuses allow the prosecution of government servants by the Central Bureau of investigation (CBI).

### **BACKGROUND**

For all offences committed by government officials under the relevant sections of Prevention of Corruption Act, 1988 and other laws, sanction of the competent authority is required for starting the prosecution. Such sanctions, however, is not required if at the time of starting the prosecution, the concerned public servant has either retired or resigned from the service of the organisation.

# **HIGHLIGHTS IN THE NEWS**

- The new rule will apply to all officials of all India service such as the Indian Administrative Service, the Indian Police Service, defence, income tax, railways, central public Sector Units (PSUs) and Public Sector Banks (PSBs).
- The DoPT order also states that government departments should not deny sanction for prosecution for offences, which effectively decentralised the process and made the concerned ministries and departments the final arbiter.
- Experts say the new order could improve CBI's chances of being allowed to investigate and prosecute corrupt public servants, although political opponents fear that it could be used to settle political scores.
- According to the prescribed government guidelines and the Supreme Court's judgement in the Vineet Narain case (1997), government departments are supposed to accord sanction for prosecution within the three months of CBI's request.

# 8. SHIPPING FIRMS ISSUES MEMORANDUM TO PMO

### **CONTEXT**

Recently, Indian shipping companies have submitted a memorandum to the Prime Minister, seeking his immediate intervention to scrap a recent notification and a circular issued under 'Make in India'.

### **HIGHLIGHTS IN THE NEWS**

• The notification and the circular were issued in February by the Ministry of Shipping and the Direction General (DG) of shipping respectively.

- The circular equates a foreign ship taken on hire, with a ship actually owned under the Indian flag by an Indian company.
- Besides, it gives priority in government contracts to those ships, just because they were once built in India.
- According to the firms, these changes would take away business from the Indian shipping companies and force them to shut down, resulting in heavy job losses.

# Fundamental Duties (Article 51A)

- To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- To cherish and follow the noble ideals which inspired our national struggle for freedom;
- To uphold and protect the sovereignty, unity and integrity of India;
- To defend the country and render national service when called upon to do so.

# Issues involved

- ✓ Indian flag vessels have been enjoying the **Right of First Refusal (ROF)** with **enables them to** match the lowest rates quoted by a foreign vessel and take that business.
- ✓ This has aided the growth of the Indian fleet since it helps to ensure that no Indian asset remains idle.
- ✓ Indian firms asserted this right has been taken away by the government and given to foreign shipping companies.
- ✓ Indian ship owners said the notification and circular Indicate that the Ministry and the DG shipping favours those who temporarily hire foreign flag assets and remit money out of India, rather than those investing in the India economy.

# 9. E-WAY BILL REFORMED

# CONTEXT

Recently, the Government has announced certain changes in the e-way bill system to tackle the Goods and Services Tax (GST) evasion.

### **HIGHLIGHTS IN THE NEWS**

- The enhanced system would come with auto-calculation of distance between the source and destination, based on the PIN codes.
- The user would be allowed to enter the actual distance as per the movement of goods, which will be limited to 10 % more than the distance displayed, according to the e-way bill portal.
- General of multiple e-way bills based on one invoice will not be permitted. This means, if the e-way bill is generated once with a particular invoice number, then no one can generate another e-way bill with the same invoice number.
- The enhanced feature would permit the extension of validity of the e-way bill when the goods are in transit.

# E- wav Bill

Touted as an anti-evasion tool, the electronic way or e-way bill was rolled out in April 2018 under the GST system, for moving goods worth over Rs. 50,000 from one state to another. The same for intra or within the state movement was rolled out in a phased manner. The E – way bill must be raised before the goods are shipped and should include details of the goods, their consignor, recipient and transporter.

When an e-way bill is generated a unique — e-way bill number (EBN) is allocated and is available to the supplier, recipient, and the transporter. An e-way bill is valid for 1 day for a distance less than 100 Kms and additional 1 day for every additional 100 Kms or part thereof. The validity of e-way bills can be extended.

# INTERNATIONAL RELATIONS

# 1. INDIA AND CHINA JOIN HANDS ON OIL

# **CONTEXT**

India and China are working closely on common trade concerns, including cooperation in buying oil and gas against the backdrop of a US squeeze through tariffs and sanctions on Iranian oil imports.

### HIGHLIGHTS IN THE NEWS

• Efforts have been made by the world's second and third largest oil importers to find common ground and energy cooperation in one of the key areas where the two sides can collectively bargain for better prices from producers

- Following a visit to New Delhi in March, 2019 by Li Faurong deputy Chief of China's National Energy Administration, the two sides created a joint working group on oil and gas. This s the first institutionalised arrangement between the two sides to cooperate in energy though they have several groups on issues such as counterterrorism and the boundary dispute.
- Iran is important for the energy security of India and China as it is one of the largest suppliers of crude to the two major economies and the supply disruption due to US sanctions has huge strategic and economic costs for the two countries.

### **Asian Premium**

Among issues that India and China can jointly work on is the 'Asian premium' charged by the Organization of Petroleum Exporting Countries (OPEC), the officials said. India is also concerned about the impact of US sanctions that kicked in on May 2 and cut off supplies from Iran, which accounted for more than 10% of the country's oil requirements and the need to rein in prices.

The new arrangement marks a significant shift from the times when India and China often competed with each other to acquire stakes in oil and gas fields in Asia and Africa. Their cooperation in the field of energy was limited and India is now also looking at the possibility of also getting South Korea and Japan to Join the buyers. collective so as to create some sort of a grouping of buyers.

# Wuhan spirit

People familiar with developments on both sides said the cooperation is in line with the 'Wuhan spirit', a reference to the informal summit last year between Prime Minister Narendra Modi and President Xi Jinping that reset bilateral relations after the 2017 military stand – off at Doklam. They also pointed to Beijing's changed stand on the UN listing of Pakistan based terrorist Masood Azhar.

### **USA Non - Committal**

Though India has raised the issue of flexibility on the sanctions on Iranian oil, the US has been non-committal. On May 7, 2019, visiting US commerce secretary Wilbur Ross said his country will not ensure sale of cheaper oil to India as the commodity is controlled by private firms.

# 2. CHINA EXPANDING PLA'S REACH AROUND WORLD: US

## CONTEXT

China continues to rapidly modernise its war – fighting capabilities, ranging from nuclear capable missiles and submarines to cyber warfare and anti-satellite weapons, even as it looks to set up military bases around the world to project hard power as well as guard its multi-billion dollar One Belt, one Road (OBOR) Infrastructure projects.

### HIGHLIGHTS IN THE NEWS

- Effectively uses Pakistan to bog down India.
- Outreach through its One Belt and One Road (OBOR) Initiative
- Establishing military bases overseas, Djibouti being the first country on the Horn of Africa.
- Chinese expanding its military capability around Taiwan Strait, South and East China Sea.
- China continues to improve its ground and submarine based nuclear capability.

# **Military Bases**

"China will seek to establish additional military bases in countries with which it has a long-standing friendly relationship and similar strategic interests such as Pakistan, and in which there is a precedent for hosting foreign militaries," said the Pentagon, in its latest report presented to the US Congress on China's expanding military power.

After setting up its first overseas military base at Djibouti on the Horn of Africa in August 2017, apart from its submarines regularly using Karachi, China's target locations for military basing could include West Asia, South East Asia and western Pacific.

China's expanding military capabilities are as of now mainly geared towards preventing any US military intervention in the Taiwan Strait, South and East China Seas as well as protecting its energy supply routes in the Indian Ocean Region (IOR).

# **India's Concerns**

- India, however, has no option but to keep a close watch on China's strategic moves in the IOR and along the 4,057-km long line of actual control, stretching from eastern Ladakh to Arunachal Pradesh, as well as the ever-expanding military clinch between Beijing and Islamabad. "China effectively uses Pakistan to bog India down in south Asia". Said an official.
- The Pentagon report says China has sold arms worth over \$ 5 billion to Pakistan, which range from the Caihong armed drones and precision strike weapons to eight Yuan –class submarines and four Type-054A multi role frigates.

# Indo - Pacific Region

• Taking note of the 73 —day troop face-off between India and China at Doklam in 2017 and another confrontation at Demochok in 2018, the Pentagon says Chinese leaders are adroit at employing tactics short of armed conflicts to pursue their country's strategic objectives in dominating the Indo-Pacific region.

"These tactics are particularly evident in China's pursuit of its territorial and maritime claims in the South and East China Seas as well as along its land borders with India and Bhutan," it said.

 Talking about the People's Liberation Army's expanding military might, the ICBMs (intercontinental ballistic missiles) now being developed by China 'represent a significant improvement' in its nuclear capable rocket forces, apart from its already large arsenal of cruise and ballistic missiles, said Pentagon.

"China continues to improve its ground and submarine – based nuclear capability, and is pursuing a viable nuclear triad with the development of a nuclear – capable air- launched ballistic missile", said the Pentagon.

# **Hypersonic Missiles**

China is also developing hypersonic missiles, which can travel more than five times the speed of sound. "In August 2018, China successfully tested the Xingkong-2 (Starry sky -2), which it publicly described as a hypersonic waverider vehicle," said the report.

# 3. DEVELOPING NATIONS CALL FOR REJECTING PROTECTIONISM

### CONTEXT

Against the backdrop of raging global trade tensions, a clutch of countries –including India, China and South Africa.

# HIGHLIGHTS IN THE NEWS

- That an inclusive multilateral trading system based on equality and mutual respect should ensure that all World Trade Organisation (WTO) members abide by rules and reject any form of protectionism.
- They say all WTO member countries must abide by rules
- They say multilateral avenues, based on consensus, remain the most effective means to achieve development oriented outcomes.
- They also stress that the concerns of developing countries must be duly addressed.

### **Joint Statement**

"The core value and basic principles of the multilateral trading system must be preserved and strengthened, particularly with a view to building trust among members. To this end, we urge WTO members to adopt measures that are compatible with WTO rules to avoid putting the multilateral trading system at risk" the countries said in a joint statement at the end of the two-day ministerial meet in New Delhi, which was also attended by WTO director general Roberto Azevedo.

### **Multilateral Avenues**

They said that multilateral avenues, based on consensus, remain the most effective means to achieve inclusive development oriented outcomes. Members may need to

explore different options to address the challenges of contemporary trade realities in a balanced manner.

# Addressing the Concerns of Developing Countries

The countries also said the process of WTO reforms must keep development at its core, promote inclusive growth and fully take into account the interests and concerns of developing members, including the specific challenges of graduating least developed countries.

"The way forward must be decided through a process that is open, transparent and inclusive. We agree to work collectively with the aim to develop proposals to ensure that our common interests are reflected in the WTO reform process," the statement said. Azevedo said the reform process will mitigate the current crisis at WTO and any talk about destroying the existing system is not the correct way and may not have the desired outcome.

# 4. RHCA CONFERENCE OF ASIA PACIFIC REGION OF WCO

### **CONTEXT**

Recently, the Central Board of Indirect Taxes and Customs (CBIC) organised the 20<sup>th</sup> Conference of the Regional Heads of Customs Administration (RHCA) of Asia Pacific Region of the World Customs Organisation (WCO) in Kochi.

## **HIGHLIGHTS IN THE NEWS**

- 'Trade Day' was organised in 7<sup>th</sup> May as a precursor to the Conference of the Regional Heads of Customs.
- The Conference took stock of the progress made in carrying forward the programmes and initiatives of WCO to promote, facilitate and secure cross – border trade in the region and the capacity building and technical assistance required by member administrations to achieve these goals.
- The Conference deliberated on security-related issues, trade facilitation, e-commerce, performance measurement, trusted trader programmes and emerging technological and logistical challenges in the fields of trade facilitation and Customs Administrations.

# **World Customs Organisation (WCO)**

WCO, established in 1952 as the Customs Co-operation Council (CCC) is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations. It represents 183 Customs administrations across the globe that collectively process approximately 98% of world trade.

The Organisation has divided its membership into six regions. Each of the regions is represent by an elected vice – chairperson to the WCO council. India is currently the Vice-Chair of the Asia Pacific Region of WCO. It assumed the responsibility in July 2018 for a two – year period.

Headquarters: Brussels, Belgium.

# 5. SERVICES TRADE RESTRICTIVENESS INDEX OF OECD

### CONTEXT

A study, commissioned by the Indian Ministry of Commerce and Industry, has found **problems with** the Service Trade Restrictiveness Index (STRI) of the Organisation for Economic Cooperation and Development (OECD).

### HIGHLIGHTS IN THE NEWS

- The study has found that the outcomes of the index are biased and counter intuitive.
- The OECD index has a large number of problems associated with it, including some significant design issues that render it impractical for use.
- For example, the index seem to **show the Indian services sector as one of the most restrictive,** particularly in policy areas like foreign entry despite the fact that since 1991, the one area that has seen maximum liberalisation in India is Foreign Direct Investment (FDI).
- Initial work also suggests that there are both theoretical and empirical inconsistencies in the OECD methodology.

### CONCLUSION

- The data seems to have been generated by rather arbitrary procedures and reflects a developed country bias.
- India has approached several developing countries during the recently concluded WTO talks in New Delhi to build consensus around the new method of measuring trade restrictiveness in the services sector.
- Unlike manufacturing trade which has well documented system of classification of commodities, the problem in services is that for a long time there wasn't any was to know whether a country's policies were restrictive. Hence, a robust and unbiased index for quantifying the restrictiveness of the services trade in needed.

# Services Trade Restrictiveness Index (STRI)

Launched in 2014, STRI ranks countries based on their services trade policies in 22 sectors such as computer services, air transport, legal services construction etc. STRI is now available for 2018 for a total of 45 economies (36 OECD and the rest non-OECD). The countries and sectors represent over 80% of global trade in services.

There is also a **Digital STRI** that identifies, catalogues, and quantifies cross –cutting barriers that affect **services traded digitally.** The STRI indices take values between zero and one, one being the most restrictive. **India's Performance in STRI 2018:** India has a STRI score **above average** in all sectors.

# 6. WTO'S NEW DELHI MEET

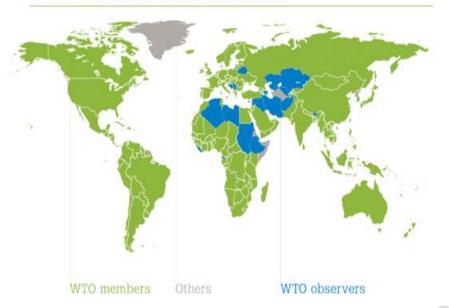
### CONTEXT

A World Trade Organisation (WTO) ministerial meet of developing countries was recently organised in New Delhi.



- The meeting was a run-up to the twelfth Ministerial Conference of the WTO to be held in Kazakhstan in 202.
- India, along with other participating countries, signed a declaration urging members of the WTO
  to "engage constructively" to prevent any delay in filling out vacancies of its appellate body for
  trade dispute settlements.
- The dispute settlement system of the WTO is a central element in providing security and predictability to the multilateral trading system.
- The core value and basic principles of the multilateral trading system must be preserved and strengthened, particularly with a view to building trust among Members.
- The participating countries reaffirmed the pre-eminence of the WTO as the global forum for trade rules setting and governance and agreed to work together to strengthen the WTO and find the solution of the multiple challenges, confronting the rule-based multilateral trading system.
- The declaration also highlights the need to "preserve" the Special and Differential Treatment (S&D) mechanism.

# WTO members and observers



### **BACKGROUND**

The meeting was held at a time when the multilateral rule – based – trading system is serious and facing grave challenges. In the recent past, there have been increasing unilateral measures and countermeasures by members, deadlock in key areas of negotiations and the impasse in the Appellate Body, which threaten the very existence of 'Dispute Settlement Mechanism' of the WTO and

# impacts the position of the WTO as an effective multilateral organisation.

The WTO is struggling to appoint new members to its understaffed Appellate Body that hears appeals in trade.

# Special and Differential (S &D) Treatment Provisions

- The WTO Agreements contain special provisions which give developing countries special rights and developed countries the possibility to treat developing countries more favourably than other WTO Members.
- The special provisions include :
- ✓ Longer time periods for implementing Agreements and commitments.
- ✓ Measure to increase trading opportunities for developing countries.
- ✓ Provisions requiring all WTO members to safeguard the trade interests of developing countries.
- ✓ Support to help developing countries build the capacity to carry out WTO work, handle disputes, and implement technical standards.
- ✓ Provisions related to least developed country (LDC) members.

# 7. US WITHDRAWN GSP FOR INDIA

### **CONTEXT**

The US has announced that it will terminate India's designation as a beneficiary of its Generalized System of Preferences (GSP) from June 5, 2019.

## What is GSP?

- ✓ The idea of granting developing countries preferential tariff rates in the markets of industrialized countries was originally presented at the first United Nations Conference on Trade and Development (UNCTAD) conference in 1964.
- ✓ The GSP was adopted at UNCTAD in New Delhi in 1968 and was instituted in 1971.
- There are currently 13 countries which grant GSP preferences to developing and least developed countries: Australia, Belarus, Canada, the European Union, Iceland, Japan, Kazakhstan, New Zealand, Norway, the Russian federation, Switzerland, Turkey and the United States of America.
- ✓ GSP is the largest and oldest US trade preference programme. Established by the Trade Act of 1974, GSP promotes economic development by eliminating duties on thousands of products when imported from one of 120 designated beneficiary countries and territories.

### **IMPACT OF GSP WITHDRAWAL**

India has been the biggest beneficiary of the GSP regime. In 2018, \$ 6.3 billion of Indian merchandise exports to U.S. were covered by GSP. The sector which could face the impact of withdrawal of GSP regime is gem and jewellery, leather and processed foods.



However, India has said that the impact is "minimal", given that Indian exporters were only receiving duty-free benefits of \$190 million on the country's overall GSP – related trade of \$5.6 billion. This could impact India's competitiveness in items groups such as raw materials in the organic chemicals sector and intermediary goods in the US market, alongside items such as iron or steel, furniture, aluminium and electrical machinery.

The impact on small industries in the country could be significant. The impact on small industries in the country could be significant. Such industries would lose their market share in the U.S. without fiscal support to help them maintain their edge.

# Why GSP was revoked?

- ✓ India's new e-commerce rules which have impacted American companies like Amazon and Walmart (majority owner of Flipkart).
- ✓ Price controls on medical devices (cardiac stents)
- ✓ Tariffs on products like smart watches and high-end mobile phones.
- ✓ Lack of greater market access for the U.S. dairy industry.

# 8. INDIA KYRGYSTAN RELATIONS

### CONTEXT

The President of Kyrgyzstan Sooronbay Jeenbekov, who holds the current chair of the Shanghai Cooperation Organization, was the guest at the swearing –in ceremony of the Prime Minister of India.

# **HIGHLIGHTS IN THE NEWS**

- India is likely to extend a \$ 100 million line of credit to Kyrgyzstan to enable the transfer of defence equipment.
- The Central Asian Republic has shared a request for defence equipment from India, taking the strategic relationship beyond the current level of bilateral exercises and the construction of a joint mountain warfare training centre in the city of Balykchy (Kyrgyzstan).

# **Bilateral Relations**

India enjoys strong bilateral ties with Kyrgyzstan since 1991 when the country was declared an independent nation. India was one of the first countries to establish diplomatic ties with independent Kyrgyzstan in 1992.

Since the establishment of diplomatic relations in 1992, the two countries have signed several framework agreements, including on Culture, Trade and Economic Cooperation, Civil Aviation, Investment Promotion and Protection, Avoidance of Double Taxation, Consular Convention etc.

The commercial trade between India and Kyrgyzstan was \$ 24.98 million in 2016-17. Indian exports to Kyrgyzstan in that fiscal year stood at \$22.66 million while Kyrgyzstan's exports to India stood at \$ 2.32 million. Apparel and clothing, leather goods, drugs and pharmaceuticals, the chemicals, and tea are some of the important items from our export basket to Kyrgyzstan.

Indian diaspora in Kyrgystan —about 9,000 Indian students are studying medicine in various medical Institutions in the country. Also, there are many businessmen living in Kyrgyzstan

who are involved in trade and several other services there. The Kyrgyz leadership have been largely supportive of India's stand on Kashmir. They also support India's bid for a permanent seat at the UNSC and India's role in the Shanghai Cooperation Organization (SCO).

Recent initiatives by India to fast-track the construction, operationalization, simplifications and streamlining of procedures for transport over the International North- South Transport Corridor as well as construction of the Chabahar sea-pot and its hinterland will go a long way in improving connectivity between the two countries In 2011, the joint 'Khanjar' series of exercises was started.

# Kyrgyzstan and Central Asia

Kyrgyzstan is a country in Central Asia which is bounded by Kazakhstan on the northwest and north, by Chin on the east and south, and the Tajikistan and Uzbekistan on the south and west. The capital is **Bishkek.** 

The Central Asia region (CAR) is rich in minerals, especially hydrocarbons. India as an extended neighbour of CAR has major geo-strategic and economic interests in this region. The future prospects for cooperation between Central Asia and India in the field of energy security seem to be very important. Peace and stability in CAR and Afghanistan seems to be the most crucial factor for India's security.

# 9. CHINA PROPOSES ASEAN+ 3 FTA

### CONTEXT

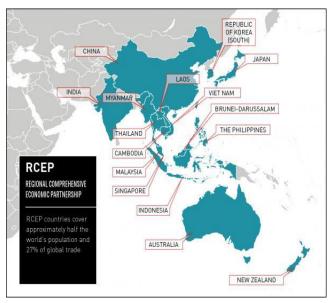
China has started pushing for a free trade pact between ASEAN +3 FTA (which includes the ten members ASEAN, China, Japan and South Korea) at the **East Asia Summit.** This would effectively mean that among the 16 countries negotiating the **Regional Comprehensive Economic Partnership (RCEP),** all except India, Australia and New Zealand would get included in the proposed pact.

# **BACKGROUND**

RCEP is a proposed free trade agreement among 16 nations (ten-member ASEAN and Australia, China, India, Japan, South Korea) at the **East Asia Summit.** This would effectively mean that among the 16 countries negotiating the **Regional Comprehensive Economic Partnership** (RCEP), all except India, Australia and New Zealand would get included in the proposed pact.

### **HIGHLIGHTS IN THE NEWS**

• RCEP is a proposed free trade agreement among 16 nations (ten-member ASEAN and Australia, China, India, Japan, South Korea and New Zealand).



- The ASEAN+3 proposals are intended to put pressure of India to given China concessions similar to those given by other countries at the RCEP negotiations.
- Also, such a proposal is a message to India that China is ready to ignore India if India remains non-flexible at the RCEP negotiations.
- The move may also result in Australia and New Zealand putting more pressure on India to be more flexible in the RCEP negotiations, as they would not want to be excluded from the proposed pact.

Earlier, it was Japan which was

insistent on India's participation in the negotiations for a regional bloc as it believed that the country could act as a balancing factor and block China's efforts to increase its influence over the region. However, if China reaches some kind of understanding with Japan on the matter, it could be a rough road ahead for India.

### CONCLUSION

RCEP members have proposed that over 90% traded items should have zero tariffs but India is hesitant about falling in line. India is especially apprehensive about Chinese goods swamping its market, forcing domestic producer's to cut production or shut down.

If finalized, the RCEP will result in the large free trade bloc in the world accounting for 25% of global GDP and 30% of world trade.

# **ECONOMICS**

# 1. RBI RELEASES 'VISION 2021' FOR PAYMENT SYSTEMS FOR 'CASH- LITE' SOCIETY

# CONTEXT

Aiming at a 'cash-lite' society, the Reserve Bank of India on 15 May 2019 released a vision document for ensuring a safe, secure, convenient, quick and affordable e-payment system as it expects the number of digital transactions to increase more than four times to 8,707 crore in December 2021.

# HIGHLIGHTS IN THE NEWS

• The 'Payment and Settlement Systems in India: Vision 2019 – 2021', with its core theme of 'Empowering Exceptional (E) payment Experience', envisages to achieve "a highly digital and cash

- lite society" through the goal posts of competition, cost effectiveness, convenience and confidence (4Cs).
- The RBI said the payment systems landscape will continue to change with further innovation and entry of more players which is expected to ensure optimal cost to the customers and freer access to multiple payment system options.

# "The Reserve Bank of India will implement the approach outlined in this Vision during the period 2019 – 2021", it said.

- The previous vision document covered the period 2016 to 2018.
- The latest vision document said payment systems like UPI/IMPS are likely to register average annualised growth of over 100 per cent and NEFT at 40 per cent over the vision period (period up to December 2021).
- The number of digital transactions is expected to increase more than four times from 2,069 crore in December 2018 to 8,707 crore in December 2021.

### BACKGROUND

The document talks about creating customer awareness, setting up a 24X7 helpline and self-regulatory organisation for system operators and service providers, among others. The basis shall have to be that pricing is reasonable to encourage usage and also pass —on to the customer the benefit of cost saved on managing cash in the system.

### **WAY FORWARD**

In all, the Payment Systems Vision 2021 has 36 specific action points and 12 specific outcomes. The aim is to enhance customer experience, empower payment system operators and service providers, enable the payments ecosystem and infrastructure, put in place forward-looking regulations and undertake risk-focused supervision.

# 2. NANDAN NILEKANI- LED PANEL ON DIGITAL PAYMENTS SUBMITS REPORT TO RBI

# **CONTEXT**

A Reserve Bank – appointed committee headed by Aadhaar architect Nandan Nilekani submitted its suggestions on promoting digital payments to Governor Shaktikanta Das.



NANDAN NILEKANI

### HIGHLIGHTS IN THE NEWS

- In January, the Reserve Bank of India had set up the five-member panel on deepening digital payments with a view to encouraging digitisation of payments and enhances financial inclusion through digitisation.
- Besides Infosys co-founder Nilekani, former RBI deputy governor HR Khan, former MD and CEO of Vijaya Bank Kishore Sansi and former secretary in ministries of IT and steel Aruna Sharma was also member of the panel. The fifth member is Sanjay Jain, chief innovation officer, Centre for Innovation, Incubation & Entrepreneurship (CHE), and IIM Ahmedabad.

### **CONCLUSION**

The panel was tasked with reviewing the existing status of digitisation of payments in the country, identifying the current gaps in the ecosystem and suggesting ways to bridge them and assessing the current levels of digital payments in financial inclusion.

It was also asked to undertake cross country analysis with a view cross country analyses with a view to identify best practices that can be adopted in our country to accelerate digitisation of the economy and financial inclusion through greater use of digital payments.

# 3. NATIONAL EXPLORATION LICENCING POLICY (NELP)

# **CONTEXT**

New Exploration Licensing Policy (NELP) was formulated by the Government of India, during 1997- 98 to provide a level playing field to both Public and Private sector companies sector companies in exploration and production of hydrocarbons with Directorate General of Hydrocarbons (DGH) as a nodal agency for its implementation.

### HIGHLIGHTS IN THE NEWS

- Since then, licenses for exploration are being awarded only through a competitive bidding system and National Oil Companies (NOCs).
- The activities in the Exploration and Production (E&P) sector have been significantly boosted by this policy and it has opened up E & P sector to private and foreign investment with 100% Foreign Direct investment (FDI).
- NELP was replaced by Hydrocarbon Exploration and Licensing Policy (HELP) in 2016.

# **RELATED INFORMATION**

# Hydrocarbon Exploration and Licensing Policy (HELP)

HELP was announced in 2018 by the Government to reduce import dependency on oil and gas by 10% by 2022. Four main facets of this policy are :

- ✓ Uniform license for exploration and production (E & P ) of all forms of hydrocarbon.
- ✓ As open acreage policy.
- ✓ Easy to administer revenue sharing model.
- ✓ Marketing and pricing freedom for crude oil and natural gas produced.

While the uniform licence enables the contractor to explore conventional as well as unconventional oil and gas resources like shale gas and gas hydrates under a single license, the Open Acreage Policy enables companies to choose the blocks from the designated area. The policy shifts **production – linked payment system to administer the revenue – sharing model** under which the government will receive a share of the gross revenue from the sale of oil, gas etc.

# 4. SURJITH BHALLA COMMITTEE

### CONTEXT

Recently, the Surjit Bhalla Committee has submitted its Report. The Committee was constituted by the Ministry of Commerce and Industry to suggest steps to boost India's export.

### **HIGHLIGHTS IN THE NEWS**

- The Committee recommended a host of measures that include a road map for doubling India's exports of goods and services to over \$ billion by 2025.
- Creation of "Elephant Bonds" (25-year sovereign bonds) in which people declaring undisclosed income will be bound to invest 50%. The fund will be utilised only for infrastructure projects.
- Lowering effective corporate tax rate, bringing down the cost of capital and simplifying regulatory and tax framework for frame work for foreign investment funds.
- Increasing the capital base of EXIM Bank by another Rs. 20,000 crore by 2022, setting up of empowered investment promotion agency and seeking inputs from industry and MSMEs before signing Free Trade Agreements (FIAs) and sensitising them of its benefits.
- In-depth assessment of the existing FTAs and their impact on the competitiveness of the Indian industry; remedial measures, if any, to be considered for future FTA negotiations and maintaining a database based on such assessment.
- State governments need to be closely involved in improving the competitiveness of exports by providing support measures in a World Trade Organisation (WTO) consistent manner.

# **RECOMMENDATIONS**

- For the textiles and garments sector, it suggested modification in labour laws (like the Industrial Disputes Act, 1947) to remove limitation on firm size and allow manufacturing firms to grow.
- To promote tourism and medical value tourism, the committee recommended simplification in medical visa regime, setting up of a pan India tourism board.

• Similarly, to promote agriculture exports, it has asked for abolishing Essential Commodities Act and the APMC (Agricultural Produce Market Committee).

# 5. RBI ALLOWS FOREIGN INVESTORS TO INVEST IN MUNICIPAL BONDS

### CONTEXT

The Reserve Bank of India (RBI) has eased norms for Foreign Portfolio Investors (FPIs) by allowing them to invest in Municipal Bonds under prescribed limits.

### HIGHLIGHTS IN THE NEWS

- The limits for investing in Municipal bond are the same as that of FPI investment in State Development Loans (SDLs), which is currently 2% of outstanding loans.
- Investing in municipal bonds in India is not a popular opinion, but if FPI is start investing in these bonds, the domestic players also might find interest and also could prove to be a good income source for municipalities.

# Municipal bonds

Municipal bonds are **bonds** issued by Urban Local Bodies (ULBs) – municipal bodies and municipal bodies and municipal corporate (entities owned by municipal bodies) to raise money for financing specific projects specifically infrastructure projects. These Bonds has tax-free status if they conform to certain rules and their interest rates are market – linked.

Bangalore Municipal Corporation was the first ULB to issue Municipal Bond in India in 1997. In 2015, SEBI made fresh guidelines for the issue of municipal bonds for enabling the ULBs to mobilise money. The bonds are known as revenue bonds when raised for on project. Municipal bond' would hold corporations to directly raise funds without looking to State grants or agencies such as the World Bank and help in financing projects such as Smart Cities.

# State Development Loan (SDL)

- ✓ State Development Loans (SDLs) are market borrowings by State Governments. RBI co-ordinates the process of selling these securities.
- ✓ Each State is allowed to issue bonds up to a certain limit each year.
- ✓ Generally, the coupon rates on SDLs are higher than those of Government securities (popularly called G-secs) of the same maturity.

- ✓ SDLs are, however, considered safer than loans by State Government undertakings because RBI has the power to make repayments out of Central Government allocation to states which life in an account with RBI.
- ✓ SDLs are normally sold through and auction process, just like Central Government securities. SDLs too are traded

**NOTE:** The primary market is where securities are created. It's in this market that firms float new stocks and bonds to the public for the first time. An Initial Public Offering (IPO) is an example of a primary market. The secondary market is where investors buy and sell securities they already own. The secondary market is commonly referred to as the stock market. Example: Sensex.

# Categories of Foreign Portfolio Investors (FPIs)

- **← Category II** FPIs largely include regulated institutions, persons, broad based funds and university, pension and endowment funds.
- **← Category III (High Risk)** which would include all other FPIs not eligible to be include in the above two categories.

# 6. RBI EXTENDS OMBUDSMAN SCHEME TO NON DEPOSIT TAKING NBFC'S

## CONTEXT

Recently, the Reserve Bank of India (RBI) announced the extension of the Ombudsman Scheme for Non-Banking Financial Companies (NBFCs), to all eligible non- deposit taking NBFC-NDs, having and asset size of Rs. 100 crore or above with customer interface.

- As per the scheme, a customer can register complaints against an NBFC-ND on grounds such as non – observance of fair practise code, non-payment of deposits or interest by the NBFC-ND, failure to provide adequate security documents or requisite notice, failure to ensure transparency, among others.
- It has been done to ensure **expeditious redressal of complaints** against deficiency in services concerning loans and other matters relating to deficiency in the services by NBFC NDs.
- However, the scheme still excludes various NBFC groups such as Infrastructure Finance Companies
  (NBFC-IFC), Core Investment Company (CIC), Infrastructure Debt Fund Non-Banking Financial
  Company (IDF NBFC) and also NBFCs under liquidation.

# Ombudsman Scheme for Non-Banking Financial Companies (NBFCs)

- ✓ The Scheme was launched in February 2018, for redressal of complaints against NBFCs registered with RBI and covered all deposit accepting NBFCs.
- ✓ The scheme also **provides for an appellate mechanism** under which the complainant/NBFC has the option to appeal against the decision of the Ombudsman before the appellate authority.
- ✓ The offices of the NBFC Ombudsmen are functions at **Chennai**, **Kolkata**, **Mumbai** and **New Delhi** and handle complaints of customers in the respective zones.

# 7. NABARD FUND FOR RURAL AGRICULTURE STARTUPS

### CONTEXT

The National Bank for Agriculture and Rural Development (NABARD) recently announced a Rs. 700-crore venture capital fund for equity investments in agriculture and rural – focused start-ups.

### HIGHLIGHTS IN THE NEWS

- NABARD has been contributing of other funds till now and this is the first time that the rural development bank has launched a fund of its own.
- The fund has been launched by Nabventures, a subsidiary of NABARD.
- The found NABENTURES Fund I has a **proposed corpus of** Rs. 500 crore with a greenshoe option of Rs. 200 crore.
- The fund is registered with SEBI as a Category II Alternative investment Fund.
- The fund is expected to have a high impact as it will provide a boost to investment ecosystem in the core areas of agriculture, food and improvement of rural livelihoods.

# **Greenshoe Option**

A greenshoe option is an over-allotment option. In the context of an initial public offering (IPO), it is a provision in and underwriting agreement that grants the underwriter the right to sell investors more shares than initially planned by the issuer if the demand for a security issue proves higher than expected.

In risk capital parlance, exercising a green shoe option allows a venture capital or private equity firm to raise capital over and above its original target corpus, having received greater interest from investors, backing its investment thesis or track record.

# 8. COMPETITION COMMISSION OF INDIA

# **CONTEXT**

Recently, the competition Commission of India (CCI) celebrated its 10<sup>th</sup> Annual Day on 20<sup>th</sup> May 2019.



Ashok Kumar Gupta, Chairperson of Competition Commission of India

# **HIGHLIGHTS IN THE NEWS**

- CCI is a statutory body established under the Competition Act, 2002.
- CCI was created to enforce to enforce the Competition Act to prohibit anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and M& A).
- It is the duty of the commission to eliminate practice having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade in the markets of India.
- The Commission is also required to given opinion on competition issues on a reference received from a statutory authority established under any law and to undertake competition advocacy, create public awareness and impart training on competition issues.
- CCI consists of a Chairperson and 6 Members appointed by the central Government.

# 9. FACTORS PREVENTING FINANCIAL INCLUSION

# **CONTEXT**

Recently, Business Correspondents (BCs) and bankers have flagged some issues that are blocking financial inclusion in the country.

# HIGHLIGHTS IN THE NEWS

✓ Aadhaar enabled payment system (AePs) devices subsidy, being offered by NABARD is not being availed by the bank and BCs cannot afford the same. This restricts the access to Direct Benefit Transfer (DBT) money to the citizens.

- ✓ Jan Dhan accounts and accounts in rural areas are not being identified by the common IFSC code of centralised Core Banking System. Hence, any service to these accounts is violation of government intent and invites GST charges.
- ✓ Fee proposed by the government is not being paid to BC agents, thus making the work unviable for them.
- ✓ <u>In September 2018, the Supreme Court set aside mandatory linking of Aadhaar with bank</u> accounts, but allowed DBT related Aadhaar use.\\\

# Who are business correspondents?

Business Correspondents (BC), authorized by the Reserve Bank of India, are retail agents engaged by banks for providing banking services at locations mostly remote areas — other than a bank branch or ATM. BCs enable a bank to provide its limited range of banking services at low cost, thus promoting financial inclusion.

# **AePS and DBT**

- ✓ Aadhaar enabled Payment System(AePS) is a bank-led model which allows **online interoperable financial inclusion transaction** at PoS (MicroATM) through the Business correspondent of a bank using the **Aadhaar authentication**.
- ✓ The only inputs required for a customer to do a transaction under AePS are :
- IIN ( Identifying the Bank to which the customer is associated)
- Aadhaar Number
- Fingerprint captured during their enrolment
- ✓ The **Direct Benefits Transfer (DBT)** simply involves transferring the subsidy amount and other benefits (called transfers) directly to the beneficiaries' bank accounts instead of providing it through government offices.
- ✓ AePS helps targeted beneficiaries under DBT in receiving the subsidy amount.

# SCIENCE AND TECHNOLOGY

# 1. NEPAL'S FIRST EVER SATELLITE: LAUNCH DRAWS BITTER SWEET REACTIONS

## CONTEXT

Nepal's first ever satellite, Nepali Sat – I was launched into space from the US in mid April 2019 amid much fanfare. Less than a month after the launch, though experts in the Himalayan country are questioning the enormity of the effort.

### HIGHLIGHTS IN THE NEWS

- The NepaliSat-1, a 1.3 kg cube nano-satellite developed by the Nepali duo Abhas Maskey and Hariram Shrestha at Japan's Kyushu Institute of technology, bears the Nepali flag and the logo of the Nepal Academy of Science and Technology (NAST).
- The Japanese Institute is learnt to have invested 30 million Nepali rupees in developing the satellite, whose primary purpose is academic research.
- Madhu Sudan Dahal, who is pursuing a PhD in telecommunications, believes it is common place in Japan for university students to develop such nanon satellites for academic research indicating that the NepaliSat-1 was perhaps merely one such run-of-the-mill effort.

# NepaliSat – 1

It is a low orbit satellite which will be in the 400-km distance from the Earth's surface. It will be stationed at the International Space Station for a month and then it will be sent to orbit the earth. The satellite will take photographs on a regular basis to gather geographical information of the country.

The satellite has a Nepali flag and the NAST log. It also has the name of the scientists involved in the making of the satellite. Nepal Academy of Science and Technology has invested nearly Rupees 20 million for the satellite that weighs 1,3 kilograms, a small satellite with limited capability.

# PQ -1 Satellite

- ✓ Experts from Nepal's science community say the country's engineers have already developed PQ –
   1 which is the country's first pico –satellite
- ✓ It is believed that the PQ -1 is the country's first ever indigenous satellite, likely to be launched from Nepal sometime next year.
- ✓ In contrast to the PQ-1 the scope of the much celebrated NepaliSat-1 is extremely limited. Its main aim is only to collect data about the mountain country's topography and the Earth's magnetic field, using a five megapixel camera and a magnetiometer, according to the NAST.
- ✓ Some experts say the newly launched nano—satellite doesn't have the professional capabilities of a full-fledged satellite and that Nepal doesn't even have a home based ground station that can receive and process satellite data.

# 2. GENES OF CLIMATE- RESISTANT CHICKPEA VARIETIES IDENTIFIED.

### CONTEXT

An International term led by the Hyderabad – based International crops Research Institute for the Semi – Arid Tropics (ICRISAT), identified in chickpea four important genes for heat tolerance and three important genes for drought tolerance.

### **BACKGROUND**

Chickpea is a cool season crop, so in general any further increases in temperature is expected to further reduce the yield. The study has found the chickpea originated in the Mediterranean/south-west Asia and migrated to south Asia. It reached India about two centuries ago, apparently through Afghanistan. In parallel, it migrated from the Mediterranean to east Africa and central Asia.

# HIGHLIGHTS IN THE NEWS

- With rising temperatures and increasing climatic fluctuations due to climate change, the identification of these climate- resistant genes will help in developing newer chickpea varieties which can tolerate temperatures up to 38o C. Also, the identification of other genes with important agromic traits will help increasing the yield and providing better resistance to pests and diseases.
- The study was based on complete genome sequencing of 429 chickpea lines from 45 countries. More than 90% of chickpea cultivation area is in South Asia, including India. Globally, more than 70% yield is lost due to drought and increasing temperatures.

# **WAY FORWARD**

With the identification of the heat and drought – tolerant genes, it will be possible to cross a chickpea landrace carrying those genes with a variety and select only those lines (progenies) with the genetic markers that have the heat and drought tolerance genes. By using such genomics – assisted breeding approach, the time taken to produce a new heat – and drought-tolerant chickpea variety can be halved from about eight to four years.

# 3. DNA DATABASE COMING UP FOR INDIAN RHINO

## CONTEXT

The Union Environment Ministry embarked on a project to create DNA profiles of all rhinos in the country.

- By 2021, the project's deadline, the Indian rhino could be the first wild animal species in India to have all its members DNA-sequenced.
- The Project's proponents, including the World Wide Fund for Nature-India (WWF-India) and the centre funded Wildlife Institute of India (WII), said the exercise would be useful in curbing poaching and gathering evidence in wildlife crimes involving rhinos.

# Assam's Kaziranga National Park.

There are about 2,600 rhinos in India, with more than 90% of the population concentrated in Assam's Kaziranga National Park. The project is a subset of the Centre's larger, ongoing rhino conservation programme. Since the 1980s, the government has been trying to move a significant has been trying to move a significant number of rhinos out of Kaziranga in the interest of the species' conservation, threats from poaching and challenges to their habitat.

Outside Kaziranga, there are about 200 rhinos in West Bengal, 40 in Uttar Pradesh and 1 in Bihar. There are three species of rhinos, of which only one --- the Indian rhinois found in the country. The rhino – is found in the country. However poaching reduced its numbers to about "200 wild animals by the end of the 20<sup>th</sup> century."

# 4. 'BRAIN' OF WORLD'S LARGEST TELESCOPE DESIGNED

### **CONTEXT**

Scientists at Cambridge finished designing the 'brain' of the square kilometre Array (SKA), the World's largest radio telescope.



# **HIGHLIGHTS IN THE NEWS**

The SKA will enable astronomers to monitor the sky in unprecedented detail and survey the entire sky much faster than any system currently in existence, researchers said.

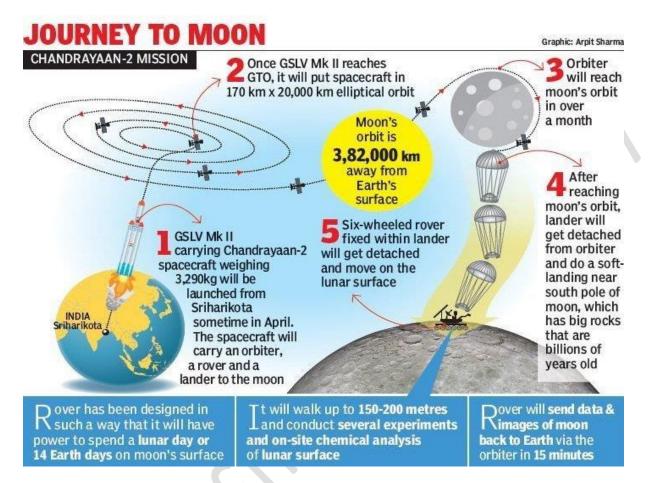
The SKA's Science Data Processor (SDP) consortium has concluded its engineering design work, marking the end of five years' work to design one of two supercomputers that will process the enormous amounts of data produced by the SKA's telescopes.

- The SDP consortium, led by the University of Cambridge in the UK, has designed the elements that will together form the 'brain' of the SKA. SDP is the second stage of processing for the masses of digitised astronomical signals collected by the telescope's receivers. In total, close to 40 institutions in 11 countries took part.
- The role of the consortium was to design the computing hardware platforms, software, and algorithms needed to process science data from the Central Signal processor (CSP) into science data products. SDP itself will be composed of two supercomputers, one located in Cape Town, South Africa and one in Perth, Australia.

# 5. ISRO'S SEVEN MEGA MISSIONS

### **CONTEXT**

ISRO has planned seven mega missions, Including Chandryan -2, to be conducted over a period of 10 years.



- Of the 7 mega missions have been defined —Chandrayaan -2, XPoSat and Aditya L1.
- The four other undefined missions, which are in the planning stage, are **Mangalyann-2,Venus** mission, Lunar Polar Exploration and Exoworlds.
- Xposat will be launched to study cosmic radiation in 2020, Aditya L1 to the Sun in 2021,
   Mars Orbiter Mission -2 in 2022, Venus Mission in 2023, Lunar polar Exploration or Chandrayaan -3 in 2024 and Exowarlds, and exploration outside the solar system in 2028.
- Adity-11 will play a key role in understanding and predicting climate change on Earth. The
  payloads will study the solar corona. Corona has an influence on the upper atmosphere and
  that impacts climate change on earth.
- Aditya-L1 will be placed in a 'libration orbit', which is about 1.5 million km from Earth. It is
  about 1% of the distance between the Sun and the Earth, where the gravity of the two

celestial objects equalises. Placing it in such an orbit allows the spacecraft to circle along with the earth, thereby constantly facing the Sun.

- Xposat will be a five- year mission, carrying a polarimeter instrument made by Raman Research Institute to measure cosmic radiation. The spacecraft will be placed in a circular 500-700 km orbit.
- The mission to Venus will focus on studying the surface and its sub-surface, atmospheric chemistry and the interactions with solar radiation.

# 6. RISAT- 2B SATELLITE

### CONTEXT

The Indian Space Research Organisation (ISRO) has successfully **launched a microwave** earth observation Satellite, Radar Imaging Satellite – 2B (RISAT – 2B) through Polar satellite Launch Vehicle C-46 (PSLV-C46), which would enhance the country's surveillance capabilities.

### **BACKGROUND**

The country has high – resolution optical imaging CartoSAT satellites, but they get blinded by dense cloud cover. When it is cloudy or dark, 'regular' remote-sensing or optical imaging satellites – which work like a light-dependent camera-cannot perceive hidden or surreptitious objects on the ground.

- Satellites that are equipped with an active sensor, the synthetic aperture radar (SAR), can sense
  or 'observe' Earth in a special way from space, day and night, rain or cloud.
- Two previous radar-enabled satellites launched by India into space were RISAT -1 and RISAT -2, the latter being an acquisition from Israel.
- ♦ These satellites helped security and intelligence agencies to plan surgical strike in 2016 on terror launchpads in Pakistan-Occupied Kashmir and the Balakot aerial strike in February this year.
- ♦ The first satellite in the RISAT series RISAT-2 was launched in 2009. The 300kg satellite used an X-band Synthetic Aperture Radar sensor made by Israel Aerospace Industries.
- ♦ RISAT-1, an indigenously developed radar imaging satellite, was launched in 2012. The launch of RISAT-1 was postponed to prioritize the launch of RISAT -2 after the 2008 Mumbai terror attack.

# **RISAT-2B**

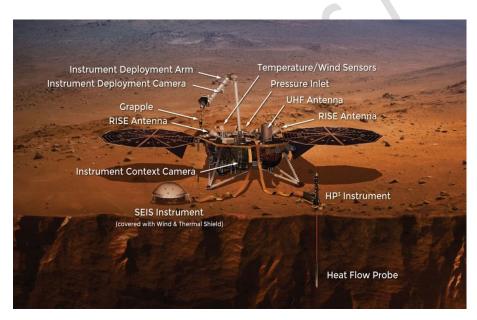
RISAT – 2B is built to work for at least **five years** and would **replace the RISAT** -2 that has been in use for monitoring activities in camps in Pakistan and thwarting infiltration bids by terrorists from across the border. This is the **third Indian RISAT in ten years** and has been **placed at a low earth** 557 – kilometre orbit. RISAT -2B's **X** – **band Synthetic Aperture Radar can give details such as size of objects on Earth, structures, movement and change.** 

- ◆ The information will complement data from the normal optical remote sensing satellites.
- ◆ The data from this satellite are vital for the Armed Forces as well as agriculture forces as well as agriculture forecasters and disaster relief agencies.
- ◆ The new satellite will enhance India's all —weather (space-based) capabilities in agriculture, forestry and disaster management.

# 7. MARSQUAKE

# **CONTEXT**

NASA's robotic **Mars Insight lander** has recorded a likely 'Marsquake' for the first time ever which is termed as **Martian Sol** 128 event.



### HIGHLIGHTS IN THE NEWS

• The faint seismic signal was detected by the lander's Seismic Experiment for Interior Structure (SEIS) instrument.

- In contrast to the Earth which is constantly quivering with seismic noise, the Martian surface is extremely quiet.
- This seismic study on the martian surface, helps in knowing the deep interiors of the red planet.
- Before this, three other seismic signals were detected but these signals were smaller than the Sol 128 event and more ambiguous in origin.

# 8. INSIGHT MISSION

### CONTEXT

In Sight (Interior Exploration using Investigations, Geodesy and Heat Transport) is a Mars lander designed to give the Mars its first through check-up since it formed 4.5 billion years ago.

# **HIGHLIGHTS IN THE NEWS**

- It is the first outer space robotic explorer to study in depth the 'inner space" of Mars.
- It also measures tectonic activity and meteorite impacts of Mars.
- This mission is part of **NASA's Discovery Programme** for highly focused science missions that ask critical questions in solar system science.

# **NASA's Discovery Programme**

- ✓ It is a series of cost effective, highly focused scientific space mission that are exploring the Solar System
- ✓ It is launched in 1992 as a complement to NASA's larger Flagship planetary science explorations.
- ✓ Its goal is to achieve outstanding results by launching more smaller mission using fewer resources and shorter development times.

# 9. CLEAN MEAT

### CONTEXT

Scientists at the Centre for Cellular and Molecular Biology (CCMB) would conduct the country's first project to research on **cell-based meat**, also called **clean meat**.

### HIGHLIGHTS IN THE NEWS

The National Research Centre on Meant would partner with the CCMB in the pioneering work to
develop cultured meat, which is said to be equivalent to conventional animal meat in terms of
taste and feel, with the only difference being in the method of production.

- Clean meat would be **produced through cellular agriculture with cells sourced from animals** and cultivated into meat.
- The Atal incubation Centre (AIC) of the CCMB has been partnering with the Humans Society international (HIS) to develop and promote the clean meat sector.
- The AIC and HSI have also announced the launch of 'Centre for Predictive Human Model System'
  (CPHMS), which would be dedicated for promoting the new approach of scientific research using
  non-animal models.



#### **WAY FORWARD**

The facility would propagate non-animal methodologies in life sciences research in India as it has been happening in the west.

It would be involved in developing a scientific and policy framework on the advance non – animal science.

Though animal testing for research has

been in practice for decades, science has progressed in using computational and in-vitro models, which are resource-friendly and come at a lower cost, besides being accurate at predicting human outcomes.

# **ENVIRONMENT & ECOLOGY**

# 1. TWO- THIRDS OF WORLD'S LONGEST RIVERS SEVERED BY DAMS, RESERVOIRS: STUDY

# **CONTEXT**

Just over one-third of the world's 246 longest rivers remain free-flowing, according to a study on 14 May 2019 which found that dams and reservoirs are drastically reducing the diverse benefits offered by healthy rivers.

A team of international researchers, including those McGill University statuses of 12 million km of rivers worldwide.



#### HIGHLIGHTS IN THE NEWS

- The study provides the first ever global assessment of the location and extent of the planet's remaining free-flowering rivers.
- Researchers determined that only 21 of the world's 91 rivers longer than 1,000 kilometres that originally flowed to the ocean still retain a direct connection from source to sea.
- The planet's remaining free-flowing rivers are largely restricted to remote regions of the Arctic, the Amazon Basin, and the Congo Basin.

#### CONCLUSION

Free- Flowing Rivers are important for humans and the environment alike, yet economic development around the world is making them increasingly rare. Dams and reservoirs are the leading contributors to connectivity loss in global rivers. The study estimates there are around 60,000 large dams worldwide, and more than 3,700 hydropower dams are currently planned or under construction.

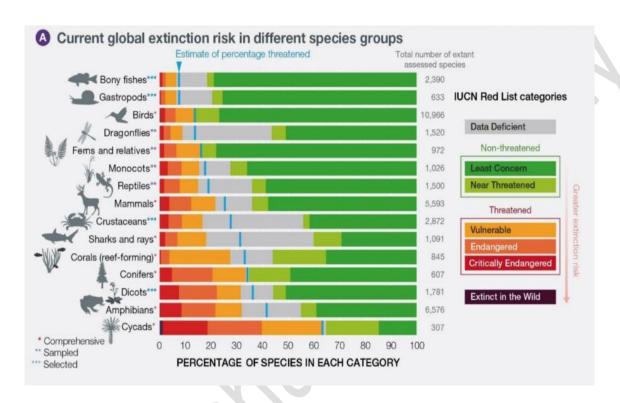
# 2. ONE MILLION SPECIES AT RISK OF EXTINCTION, UN REPORT WARNS

# **CONTEXT**

One million of the planet's eight million species are threatened with extinction by humans, scientists warned in what is described as the most comprehensive assessment of global nature loss ever.

#### HIGHLIGHTS IN THE NEWS

- Their landmark report paints a bleak picture of a planet ravaged by and ever-growing human population, whose insatiable consumption is destroying the natural world.
- The global rate of species extinction "is already tens to hundreds of times higher than it has been, on average, over the last 10 million years," according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services(IPBES), a UN committee, whose report was written by 145 experts from 50 countries.



#### **BACKGROUND**

Shrinking habitat, exploitation of natural resources, climate change and pollution are the main drivers of species loss and are threatening more that 40% of amphibians, 33% of coral reefs and over a third of all marine mammals with extinction, the IPBES report said.

The report comes six months after the UN Intergovernmental Panel on Climate Change (IPCC) warned that the world has less than 12 years to avoid catastrophic levels of global warming. In the same way that the IPCC report put the climate crisis on the political agenda, the authors of the IPBES report hope that it will thrust nature loss into the global spotlight.

#### CONCLUSION

Just as with climate change, humans are the main culprits of biodiversity damage, altering 75% of Earth's land and 66% of marine ecosystems since pre-industrial times, according to the report. The report emphasizes the disastrous impact of population growth and rising demand. It

notes that the world's population has more than doubled (from 3.7 to 7.6 billion) in the last 50 years, and gross domestic product per person is four times higher.

### 3. COMMITTEE CONSTITUTED TO OVERSEE CLEAN AIR PROGRAMME

#### CONTEXT

The Union Environment Ministry constituted a committee to implement the National Clean Air Programme (NCAP), which aims to reduce particulate matter (PM) pollution by 20% -30% in at least 102 cities by 2024.

#### **BACKGROUND**

The World Health Organisation's (WHO) database on air pollution over the years has listed Tier I and Tier II Indian cities as some of the most polluted places in the world. In 2018, 14 of the world's 15 most polluted cities were in India. To solve the issue The NCAP unveiled in January is envisaged as a scheme to provide the States and the Centre with a framework to combat air pollution.

#### HIGHLIGHTS IN THE NEWS

- The committee will be chaired by the Secretary, Union Environment Ministry and has among its members the Joint Secretary (Thermal), Ministry of Power; Director General, The Energy Resources Institute (TERI), the Delhi-based think-tank; and Professor Sachidananda Tripathi, Indian Institute of Technology Kanpur (IIT-K).
- The committee would be headquartered in New Delhi and its remit includes ensuring interministerial organisation and cooperation, sharing information and resolving issues that could arise between ministries.
- The committee would also give overall guidance and directions to effectively implement the programmes.

#### **CONCLUSION**

The NCAP is envisioned as a five-year action plan with 2019 as the first year. There would be a review every five years. States in which the cities are located are expected to produce plans that include increasing the number of monitoring stations, providing technology support, conducting source apportionment studies, and strengthening enforcement. For achieving the NCAP targets, the cities would be expected to calculate the reduction in pollution, keeping 2017's average annual PM levels as the base year.

The NCAP requires cities to implement specific measures such as "ensuring roads are pothole-free to improve traffic flow and thereby reduce dust" (within 60 days)

or "ensuring strict action against unauthorised brick kilns" (within 30 days). It doesn't specify and exact date for when these obligations kick in.

#### 4. UN MODERNIZES GUIDANCE FOR GREENHOUSE EMISSION ESTIMATES

#### CONTEXT

A United Nations climate change panel updated guidelines for governments to estimate greenhouse gas emissions so the most up-to-date scientific research is included.

#### HIGHLIGHTS IN THE NEWS

Under the 2015 Paris Agreement, governments are common methodologies to measure how many greenhouse emissions they have produced and how many have been removed from the atmosphere.

The Intergovernmental Panel on Climate Change (IPCC) said the new 2019 guidelines built on 2006 methodologies by updating gaps and out-of date science. They include new technologies NSE 0.45% and emissions sources across the energy, industrial processes, and waste, agriculture and forestry sectors. "The 2019 Refinement provides an updated and sound scientific basis for supporting the preparation and continuous improvement of national greenhouse gas inventories," said Kiyoto Tanabe, co-chair of the IPCC task force which prepared the report.

# 5. CYCLONE FANI

#### **CONTEXT**

Cyclone Fani is the first extremely severe, cyclonic storm to have formed in April in India's oceanic neighbourhood since 1976, according to the records of the India Meteorological Department (IMD). It was a consequence of global warming and formed due to the warming of the Bay of Bengal basin.

# HIGHLIGHTS IN THE NEWS

- It is categorized as an Extremely Severe Cyclone (ESC).
- The name of the Cyclone Fani (pronounced as Foni) was suggested by Bangladesh. It means 'snake' or 'hood of snake'.
- According to IMD, the last time an extremely severe cyclone hit India in May was in 2004.

# What makes Cyclone Fani special?

# TIMING AND STRENGTH

✓ The two factors that make Cyclone Fani, different from most other tropical cyclones at this time of the year.

- ✓ It was the longest-lived cyclone in the Bay of Bengal ever observed. The elongated time period of the storm went on for 11 days in the sea and land put together.
- ✓ Before Fani hit the Odisha coast, Chilika lake had only two active mouth-the point where it meets the sea. But, now four new mouths have opened due to wave energy with high tidal prism.
- ✓ With the opening of new mouths, a lot of sea water is entering Chilika Lake and, thereby increasing its salinity.

#### PREPAREDNESS

- ✓ The IMD tracked the storm and **issued numerous yellow warnings** for much of the south eastern portion of India when the cyclone started to intensify.
- ✓ Doppler radars Paradip and Gopalpur ports helped in tracing the clyclone accurately.
- ✓ 'Eearly Warning Dissemination System (EWDS) project' which was commissioned in 2018, addresses the existing gap in disseminating disaster warning up to the community level.
- ✓ Odisha evacuated over 1.2 million residents from vulnerable coastal areas and moved them to higher ground and into cyclone shelters built a few miles inland.
- ✓ Teams of National Disaster Response Force (NDRF), Odisha Disaster Rapid Action Force (ODRAF) along with State fire service personnel have been deployed. Defence forces were on high alert to meet any eventuality.
- ✓ On account of this, the number of casualties contained to minimal. However, there was extensive damage to the infrastructure especially, power and telecommunications.

#### **WAY FORWARD**

Cylone Fani has left behind a trail of devastation and acute suffering in Odisha. The challenge now is to restore the livelihood of people. Administrations are on full throttle in repair and relief measures. However, repairs and rehabilitation work needs to be done quickly owing to the upcoming monsoon season.

#### **EARLY WARNING DISSEMINATION SYSTEM (EWDES)**

It aims at establishing a fool-proof communication system to disseminate disaster warning up to the community level. It is a first of its kind automatic public address system in the country, implemented under national Cyclone Risk Mitigation project with the help of World Bank.

# 6. PROJECT 'SPARROW-CBIC'

### **CONTEXT**

The Ministry of Finance has decided to implement the project 'SPARROW –CBIC' for online writing of Annual Performance Appraisal Report Recording Online Window (SPARROW) for Group 'B' and 'C' Officers of Central Board of Indirect Taxes & Customs (CBIC).

#### HIGHLIGHTS IN THE NEWS

- Online writing of APARs in SPARROW for IRS(C & CE) officers has already been implemented from 2016 – 17.
- The move is a part of better HR management of officers of CBIC.
- The Directorate General of Human Resource Management (DGHRM), the HR arm of CBIC is the implementing Agency of the project.
- The Project is an important milestone in the journey towards digitisation and paperless working.

### 7. UNDRR GLOBAL ASSESSMENT REPORT

#### CONTEXT

A Global Assessment Report on Disaster Risk Reduction (GAR) released by the **United Nations**Office for Disaster Risk Reduction (UNDRR), has warned of new and much larger threats due to extreme climate changes to economies, in particular the Asia Pacific.

#### HIGHLIGHTS IN THE NEWS

- About \$5.2 billion was spent on reducing disaster risk between 2005 and 2017, representing just 3.8% of total humanitarian spending.
- **Development aid** used for things such as early warning systems, building stronger schools and hospitals, and helping farmers grow hardier crops in drought prone areas was **minuscule compared with funding for disaster response.**
- It identifies a range of major threats to human life and property, including air pollution, diseases, earthquakes, drought and climate change.
- There is also growing potential for **one type of disaster to produce or exacerbate another** as happens often in the case of heavy rains which trigger landslides and mudslides following wildfires or periods of long drought.
- It warns that failure to act more urgently to manage intertwined risks could slow or even reverse progress towards the UN goals on sustainable development, which includes eradicating poverty and hunger.
- Human losses and asset losses relative to gross domestic product tend to be higher in the countries with the least capacity to prepare, finance and respond to disasters and climate change, such as Small Island Developing States.
- Economic losses to the extent of 4% of GDP annually are projected, if countries don't invest in DRR (Disaster Risk Reduction).
- It has been estimated that an annual investment of \$6 billion in DRR strategies would generate benefits of up to \$360 billion each year.

- The report **urges governments to put the Sendai Framework into action,** shifting focus from disaster management to reducing risk.
- The GAR was launched at the 'Global Platform for Disaster Reduction (2019)' organised by the UNDRR in Geneva, Switzerland from 13 to 17 May, 2019.

#### United Nations Office for Disaster Risk Reduction (UNDRR)

The UNDRR was established in 1999 as a dedicated secretarial to facilitate the implementation of the **UN International Strategy for Disaster Reduction (UNISDR).** It is headquartered in **Geneva, Switzerland.** It is mandated to serve as the focal point in the united system for the coordination of disaster reduction and to ensure synergies among the disaster reduction activities.

It is an **organisational unit of the UN Secretarial** and is led by the Un Special Representative of the Secretary General for Disaster Risk Reduction (SRSG). UNISDR's Strategic Framework 2016-2021 has a vision to substantially reduce disaster risk and losses for a sustainable future with the **mandate to act as the custodian of the Sendai Framework,** supporting countries and societies in its implementation, monitoring and review of progress.

# **Global Platform for Disaster Reduction 2019**

- ✓ The Global Platform for Disaster Risk Reduction (GP) is a biennial multi-stakeholder forum, critical component of the monitoring and implementation process of the Sendai Framework for Disaster Risk Reduction (2015-2030).
- ✓ The theme of GP 2019 is "Resilience Dividend: Towards Sustainable and Inclusive Societies.
- ✓ Up to \$577 billion in annual global crops are at risk form **pollinator loss.** There's newly coined phrase for insect declines the **'windshield effect'**.
- ✓ 75% of the land environment and 66% of the marine environment impacted due to anthropogenic activities.
- ✓ Ocean ecosystems are degrading as temperatures rise towards 2°C above preindustrial levels. Loss of coral reefs to warming and acidifying oceans could cause a collapse in commercial and indigenous fisheries.
- ✓ Increase risk of floods and hurricanes because of the loss of coastal habitats and protection.
- ✓ Human's use of land and sea resources, climate change, pollution and invasive species are the key global threats.

- ✓ Plastic pollution has increased tenfold since 1980. 300 400 million tons of heavy metals, solvents, toxic sludge and other industrial waste are dumped into the world's water systems.
- ✓ The assessment is an accurate and comprehensive review of the damage people are inflicting on the planet. It warns that nature is declining at "unprecedented" rates and that the changes will put people at rick.
- ✓ It emphasized that **business and financial concerns are also threatened.** We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.

#### CONCLUSION

Biodiversity and nature's contributions to people are our common heritage and humanity's most important life-supporting 'safety net'. But **our safety net is stretched almost to breaking point.** Profound economic and social changes would be needed to curb greenhouse gases quickly enough to avert the most devastating consequences of a warming world.

# <u>Intergovernmental Science – Policy Platform on Biodiversity and Ecosystem Services (IPBES)</u>

The Intergovernmental science – Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body, established in 2012. The objective of IPBES is to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.

Headquarters: Bonn, Germany.

# 8. WORLD HERITAGE GLACIER STUDY

# CONTEXT

Recently, the first global study of World Heritage Glaciers was conducted by the International Union for Conservation of Nature (IUCN).

#### HIGHLIGHTS IN THE NEWS

- The study developed the first ever **inventory of glaciers on the UNESCO World Heritage list** documenting about 19,000 glaciers present in 46 out of the 247 natural World Heritage sites.
- Glaciers from almost half of 46 natural World Heritage sites such as the Khumbu Glacier in the Himalayas may disappear completely by 2100, if emissions continue at eh current rate.
- Even under a low emission scenario, eight of the 46 World Heritage sites will be ice free by 2100.

- The study also expects 33% to 60% of the total ice volume present in 2017 will be lost by 2100, depending on the emission scenario.
- Loss of glaciers will have major consequences for the availability of water resources, sea level rise and weather patterns.
- This unprecedented decline can also jeopardise the listing of the sites in question on the World Heritage list.

# **World Heritage List**

To be included on the World Heritage List, a site must be of but standing universal value and meet at least one out of ten selection criteria. UNESCO under an international treaty called the **Convention concerning the Protection of the World Cultural and Natural Heritage, 1972** is entrusted with the task to evaluate and assign a site with the 'World Heritage' tag.

### International Union For Conservation of Nature

- ✓ International Union for Conservation of Nature (IUCN) is a membership union uniquely composed of both government and civil society organisations.
- ✓ It provides public, private and non-governmental organisations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together.
- ✓ Created in 1948, IUCN has evolved into the world's largest and most diverse environmental network.
- ✓ IUCN is the global authority on the status of the natural world and the measures needed to safeguard it.

# 9. NOT ALL ANIMALS MIGRATE BY CHOICE CAMPAIGN

#### **CONTEXT**

The UN Environment India and Wildlife Crime Control Bureau (WCCB) of India launched an awareness campaign 'Not all animals migrate by choice' to be displayed at major airports across the country.

#### **BACKGROUND**

Illegal wildlife trade is driving species to the brink of extinction. A thriving industry with organized wildlife crime chains spreading across the world, in India, illegal trade in wildlife has seen a sharp rise. There is an urgent need for awareness, action and stringent enforcement of laws to put an end to all illegal wildlife trade threatening biodiversity and conservation in the wild.

This campaign is an important step forward in creating much-needed awareness on wildlife trafficking which threatens the very survival of these species.

#### HIGHLIGHTS IN THE NEWS

- It aims at creating awareness and garnering public support for the protection and conservation of wildlife, prevention of smuggling and reduction in demand for wildlife products.
- The campaign also complements worldwide action on illegal trade in wildlife through UN Environment's global campaign, Wild for Life.
- In the first phase of the campaign, Tiger, Pangolin, Star Tortoise and Tokay Gecko have been chosen as they are highly endangered due to illegal trading in International markets. Phase two will see more threatened species and explore other routes of trafficking.
- In collaboration with the Airports Authority of India and GMR Group, the campaign will travel across 22 airports across India over the next year.
- Both WCCB and UN Environment initiated a comprehensive approach with a focus on awareness building of various stakeholders towards the issue of prevention of illegal trade and smuggling of wildlife and wildlife products through exit point.

# Wildlife Crime Control Bureau (WCCB)

WCCB is a statutory multi-disciplinary body established under the Wild Life (Protection) Act, 1972 to combat organized wildlife crime in the country. It functions under the Ministry of Environment Forest and Climate Change (MoEFCC).

It is mandated to collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to State and other enforcement agencies to apprehend the criminals, to establish a centralized wildlife crime data bank etc.

It also assists and advises the customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

# 10. TREE AMBULANCE AND TREE SPADE INITIATIVES

#### CONTEXT

The Vice-President launched the "Tree Ambulance" and "Tree Spade" Initiatives on the occasion of the International Day of Biodiversity (IDB). The theme of the IDB celebration was "Our Biodiversity, Our Food, and Our Health".

#### HIGHLIGHTS IN THE NEWS

• The 'Tree Ambulance' and 'Tree Spade' initiatives are campaigns to save trees.

• The initiative will help to provide first aid treatment to tress, aid tree plantation, assist the shifting of trees, carry out seed ball distribution, act as a seed bank and facilitate awareness drives in favour of tree conservation and afforestation.

# **HEALTH**

# 1. AMR COULD CAUSE 10 MILLION DEATHS: UN

#### CONTEXT

UN interagency Coordinating Group (IACG) has released a report titled "NO TIME TO WAIT: Securing the Future From Drug – resistant Infections". The Report says that drug – resistant diseases could cause 10 million deaths each year by 2050.

#### HIGHLIGHTS IN THE NEWS

- The world has to act urgently; if timely actions are not taken antimicrobial resistance will have a disastrous impact within a generation.
- The divers of antimicrobial resistance lie in humans, animals, plants, food and the environment.
   Thus a sustained One Health response is essential to engage and unite all stakeholders around a shared vision and goals
- The countries should prioritize national action plans to scale-up financing and capacity-building efforts, put in place stronger regulatory systems and support awareness programs for responsible use of antimicrobials by professionals.
- It is also necessary to invest in research and development for new technologies to combat antimicrobial resistance.

# **Antimicrobial resistance**

It is a global crisis that threatens a century of progress in the health and achievement of the Sustainable Development Goals (SDGs). Antimicrobial resistance poses a formidable challenge to achieving Universal Health Coverage and threatens progress against many of the SDGs, including in health, food security, clean water and sanitation, responsible consumption and production, and poverty and inequality.

Misuse and overuse of existing antimicrobials in humans, animals, and plants are accelerating the development and spread of antimicrobial resistance. Currently, at least **7**, **00**,**000** people die each year due to drug – resistant diseases, including 2, 30,000 people who die from multidrug – resistant tuberculosis. By 2030 antimicrobial resistance could force up to 24 million people into extreme poverty.

#### **WAY FORWARD**

- ✓ Accelerate Progress in Countries
- ✓ Equitable and affordable access to existing and new quality-assured antimicrobials is member states
- ✓ Accelerate the development and implementation of **One Health National Antimicrobial Resistance Action Plan** within the context of the SDGs.
- ✓ Innovate to Secure the Future
- ✓ Public, private and philanthropic donors and other funders should increase investment and innovation in quality assured, new antimicrobials.
- ✓ Collaborate for More Effective Action
- ✓ Systematic and meaningful engagement of civil society groups and organizations is necessary for the One Health response to antimicrobial
- ✓ Invest for a Sustainable Response
- ✓ The IACG emphasizes the need for increased investments in the response to antimicrobial resistance, including from **domestic financing** in all countries; bilateral and multilateral financing; development institutions and banks; and private investors.
- ✓ Strengthen Accountability and Global Governance
- ✓ There is a need to convene an independent panel on **Evidence for Action against Antimicrobial Resistance** to monitor and provide the Member States with regular reports on the science and evidence related to antimicrobial resistance.

# IN Interagency Coordination Group (IACG) on Antimicrobial Resistance

IACG was established in 2016 in consultation with the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Organisation for Animal Health (OIE). The IACG's mandate is to provide practical guidance for approaches needed to ensure sustained effective global action to address antimicrobial resistance.

# 2. UJALA CLINICS (ADOLOSCENT FRIENDLY HEALTH CLINICS)

#### CONTEXT

The Rajasthan government has decided to revamp the Ujala Clinics (Adolescent Friendly Health Clinics (Adolescent Friendly Health Clinics), a part of **Rashtriya Kishor Swasthya Karyakram**, in its districts.

#### HIGHLIGHTS IN THE NEWS

- Under this, Rajasthan government will appoint peer educators and "shadow educators" for counselling of youngsters and ensure better coordination with other medical and health schemes.
- The shadow educators would provide supplementary support to the on-going counselling services.
- The Ujala clinics played an important role in connecting adolescents with the initiatives for promoting mental health, reproductive health and de-addiction.

# Rashtriya Kishor Swasthya Karyakram (National Adolescent Health Programme)

- In order to ensure holistic development of adolescent population, the Ministry of Health and family Welfare (MoHFW) launched Rashtriya Kishor Swathya Karyakram(RKSK) in 2014.
- ♣ The RKSK programme defines and adolescent as a person within 10-19 years of ago, in urban and rural areas, includes both girls and boys, married and unmarried, poor and affluent, whether they are in school or out of school.
- ♣ To guide the implementation of this programme, MoHFW in collaboration with United Nations Population Fund (UNFPA) has developed a National Adolescent Health Strategy.
- ♣ The six thematic areas of RKSK as well as that of the strategy are nutrition, sexual reproductive health, substance misuse, non-communicable diseases, mental health, injuries and violence.
- ♣ The programme envisages a paradigm shift from the clinic-based services to the promotion and prevention and reaching adolescents in their own environment, such as in schools, families and communities.
- ♣ The key drivers of the program are community based interventions like, outreach by counsellors, facility based counselling, social and behaviour change communication and strengthening of Adolescent Friendly Health Clinics (AFHC) across levels of care).

# 3. WEST NILE FEVER IN KERALA

# **CONTEXT**

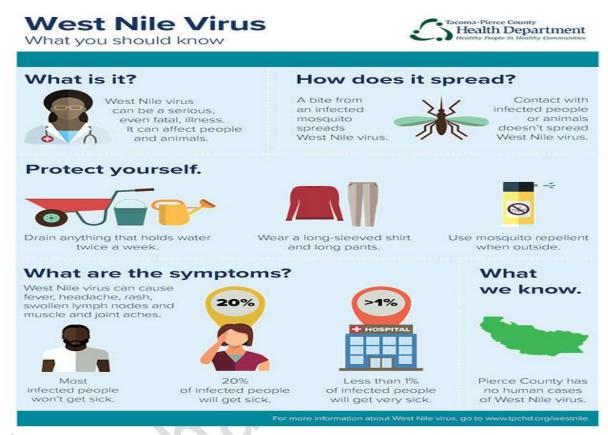
Recently, cases of Infection due to West Nile Virus have been reported in Malappuram and Kozhikode districts of Kerala.

#### HIGHLIGHTS IN THE NEWS

- These cases left the State Health Department with the twin problems of underreporting and identification of the source of West Nile Fever in the region.
- The presence of the West Nile virus was identified from the mosquito samples collected from these areas and serum samples of the close contacts of the infected persons by a team from the National Centre for Disease Control.
- There could have been more unreported cases of the disease as 80% of the infected people do not show any symptoms, according to the World Health Organization (WHO).

# **West Nile Virus**

Commonly found in Africa, Europe, the Middle East, North America and West Asia, the West Nile Virus (WNV) causes viral infection which is typically spread by Culex mosquitoes and can cause neurological disease as well as death. WNV is a member of the flavivirus **genus** and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.



# Outbreaks:

- ✓ It was first indentified in a woman in the West Niles district of Uganda in 1937, and then was identified in birds in the Nile delta region in 1953.
- ✓ Human infections attributable to WNV have been reported in many countries in the World or over 50 years.
- ✓ The largest outbreaks occurred in Greece, Israel, Romania, Russia and USA. Outbreak sites are on major birds' migratory routes.

#### Transmission :

- ✓ Virus can be injected into humans and animals and can also be transmitted through contact with other infected animals.
- ✓ Rare cases of infection have occurred through organ transplant, blood transfusion and breastfeeding.
- ✓ Till date no human to human transmission is reported.

# Symptoms:

- ✓ Most WNV infections are asymptomatic and in around 20% of infected people develop 'West Nile Fever'.
- ✓ Common symptoms include fever, headache, nausea and skin rash.

# 4. MANAV: HUMAN ATLAS INITIATIVE



#### CONTEXT

Recently, the Department of Biotechnology (DBT) launched 'MANAV: Human Atlas Initiative', a project for mapping every tissue of the human body to help understand better the roles of tissues and cells linked to various diseases.

#### HIGHLIGHTS IN THE NEWS

- Better biological insights through physiological and molecular mapping,
- Develop disease models through predictive computing,
- Allow for a holistic analysis and finally drug discovery.
- The aim of the project is to understand and capture human physiology in two stages normal stage and disease stage.
- The collated data can be useful for future researchers and clinicians and drug developers, who finally handle human bodies in disease conditions
- Such a database will come in handy in tracing cause of a disease, understanding specific pathways and ultimately decoding how the body's disease stage is linked to tissues and cells.

# 5. CHEAP DIAGNOSTIC TEST FOR HAEMOPHILIA A

#### CONTEXT

The Indian Council of Medical Research (ICMR)'s National Institute of Immunohaematology, Mumbai, has developed a cost-effective Point-of-Care (POC) rapid diagnostic test for severe **Haemphilla A** and **Von Willebrand Disease (VWD)** disease.

#### HIGHLIGHTS IN THE NEWS

- This is the first POC test for specific diagnosis of any common bleeding disorder.
- Working cost of these kits is less than Rs. 50 in comparison to existing conventional test for the diseases that costs around Rs. 4,000 to Rs. 10,000.

# Von Willebrand Disease (VWD)

- VWD is a genetic disorder caused by missing or defective von Willebrand factor (VWF), a clotting protein.
- ↓ VWF binds factor VIII, a key clotting protein, and platelets in blood vessel walls, which help form a platelet plug during the clotting process.
- The condition is named after Finnish physician Erik von Willebrand, who first described it in the 1920s.
- It is carried on chromosome 12 and occurs equally in men and women.
- **Symptoms:** People with VWD experience frequent nosebleeds, easy bruising and excessive bleeding during and after invasive procedures, such as tooth extractions and surgery. Women often experience heavy menstrual bleeding, and haemorrhaging after childbirth.

# **HAEMOPHILIA A**

Hemophilia A(also called factor VIII(FVIII) deficiency or classic haemophilia], is a genetic disorder caused by missing or defective factor VIII, a clotting protein. Although it is passed down from parents to children, about 1/3 of cases are caused by a spontaneous mutation, a change in a gene.

The gene for haemophilia is carried on the X chromosome. Hemophilia is inherited in an X-linked recessive manner. Females inherit two X chromosomes, one from their mother and one from their (XX). Males inherit an X chromosome from their mother and a Y chromosome from their father (XY).

That means if a son inherits an X chromosome carrying haemophilia from his mother, he will have haemophilia. It also means that fathers cannot pass haemophilia on to their sons. But because daughters have two X chromosomes, even if they inherit the haemophilia gene from their mother, most likely they will inherit a healthy X chromosome from their father and not have haemophilia. A daughter who inherits an X chromosome that contains the gene for haemophilia is called a carrier. She can pass the gene on to her children. Hemophilia can occur in daughters, but is rare.

<u>Symptoms</u>: People with haemophilia A often, bleed longer than other people. Bleeds can occur internally, into joints and muscles, or externally, from minor cuts, dental procedures or trauma.

# 1. STRAIT OF HORMUZ

#### **CONTEXT**

Recently, four commercial vessels were sabotaged near Fujairah (an emirate of the UAE). One of the world's largest bunkering hubs lying just outside the Strait of Hormuz.

#### HIGHLIGHTS IN THE NEWS

- The incident has come at a time of heightened tensions in the Gulf. The US has deployed aircraft carrier, bomber planes and defence missiles to the region amid rising tensions with Iran.
- •Iran has threatened to block oil shipments through the Strait of Hormuz if the US succeeds in halting its energy exports.

#### **BACKGROUND**

In 2015, Iran agreed to a long-term deal referred to as the joint comprehensive Plan of Action (JCPOA) on its nuclear program with the P5+1 (US,UK, France, China, Russia & Germany).

Under the accord, Iran agreed to limit its sensitive nuclear activities and allow in international inspectors in return for the lifting of crippling economic sanctions. The US withdrew from the deal in 2018 & also recently eliminated the exceptions to US sanctions on Iranian oil.

Sanctions have pushed Iran's economy towards crisis. Recently, Iran has threatened to scale back its obligations under the 2015 nuclear deal and to close the Strait of Hormuz.



# Strait of Hormuz

❖ The waterway separates Iran and Oman, linking the Persian Gulf to the Gulf of Oman and the Arabian Sea.

- ❖ Most crude exported from Saudi Arabia, Iran, the UAE, Kuwait and Iraq all members of the Organization of the Petroleum Exporting Countries (OPEC) is shipped through this waterway.
- It is also the route used for nearly all the Liquefied Natural Gas (LNG) produced by the world's biggest LNG, exporter, Qatar.
- ❖ The UAE & Saudi Arabia have sought to find other routes to bypass the Strait, including building more oil pipelines.

# 2. EL NINO MODOKI TO INTENSIFY HEAT WAVES IN INDIA

#### **CONTEXT**

According to a study by the Indian Institute of Tropical Meteorology (IITM), the frequency, duration and intensity of heat waves in India may begin to rise from 2020.

#### HIGHLIGHTS IN THE NEWS

- "El Nino Modoki", a weather system different from El Nino, could be responsible for the increase in heat waves in India. Depletion of soil moisture and transfer of heat from the earth to the atmosphere would also trigger them.
- These events are likely to happen between 2020 and 2064, affecting parts of southern India and coastal regions.
- The study suggested an increase of 1.5-2.5 times heat wave events, with an increase of 12-18 days on an average between 2020 and 2064.
- During and EL Nino pattern, the eastern Pacific Ocean is warmer than the central and western Pacific Ocean. In an El Nino Modoki event, the central part of the Pacific Ocean warms more
- With cooling in the eastern and western parts.

# **DEFENCE**

# 1. CENTRE MANDATES AI PROJECTS FOR ALL DEFENCE PSUs.

#### CONTEXT

The Centre has made it mandatory from this financial year for all defence (DPSUs) to initiate projects relating to Artificial Intelligence, a decision rooted in the effort to enhance defence capabilities.

### **HIGHLIGHTS IN THE NEWS**

- Realising Al's potential, the ministry of defence has formed a special committee to explore use of Al for various industrial applications.
- According to media sources, the committee felt the need for Al in DPSUs.

- The other six DPSUs Bharat Dynamics Limited (BDL), BEML Ltd; Mishra Dhatu Nigam Ltd, (MIDHANI); Mazagon Dock Shiphuilders Ltd. (MDL); Garden Reach Shipbuilders and Engineers Ltd. (GRSE); Goa Shipyard Ltd. (GSL) and Hindustan Shipyard Ltd.(HSL) –are also taking up AI projects.
- BEL is working on facial recognition for security applications; IoT-based platform maintenance; social networking analysis; robotics surveillance platform and automated information extraction and synthesis.

### 2. IAF SUCCESSFULLY TEST- FIRES AERIAL VERSION OF BRAHMOS



Air Chief Marshal B.S. Dhanoa

#### **CONTEXT**

The Indian Air Force (IAF) on May 22, 2019 said it has successfully test-fired the aerial version of the supersonic BrahMos cruise missile from a Su-30 MKI fighter aircraft.

#### HIGHLIGHTS IN THE NEWS

- The 2.5 tonne air-to-surface missile has a range of around 300 km and it will significantly enhance the IAF's combat capability, military officials said.
- The BrahMose curise missile travels at a speed of March 2.8, nearly three times that of sound.
- "The launch from the aircraft was smooth and the missile followed the desired trajectory before directly hitting the land target," IAF spokesperson Group Capt Anupam Banerjee said.

### 3. TRI-SERVICE COMMAND IN THE DOMAIN OF SPECIAL OPERATIONS

#### CONTEXT

The three tri-service agencies to handle the critical modern warfare domains of **special operations, cyberspace** and **space** are taking shape with the appointment of two-star officers to head them.

# **HIGHLIGHTS IN THE NEWS**

- The personnel will be drawn from the three services on fixed tenure.
- All three divisions will function under the integrated Defence Staff (IDS).
- While each division will draw personnel from all the three services, the Special Operations Division will be headed by the Army, the Defence Cyber Agency (DCA) by the Navy and the Defence Space Agency (DSA) by the Air Force.

- Major General A.K. Dhingra will head the Special Operations Division.
- Rear Admiral Mohit Gupta will lead the DCA.
- A two-star officer (Air Vice Marshall) will head the DSA.

#### **BACKGROUND**

Naresh Chandra Committee on Defence Reforms in India (2012) pointed out the hollowness of the national security decision making process and the urgent need to change this. Thus, the committee recommended setting up three commands – Special Operations, Cyber and Space –to deal with the new challenges facing national security.

# SPECIAL OPERATION DIVISION

- ✓ It is named as Armed Forces Special Operations Division (AFSOD).
- ✓ It will comprise Special Forces of the Army, Marine Commandos (MARCOS) of the Navy, and Garuda commando force of the IAF.
- ✓ The Andaman and Nicobar Command is the first and only Tri-service theatres command of the Indian Armed Forces, based at Port Blair in the Andaman and Nicobar Islands. It was created in 2001, on the recommendation of Kargil Review Committee, to safeguard India's strategic interests in Southeast Asia and the Strait of Malacca by increasing rapid deployment of Military assets in the region.
- ✓ The idea is to eventually have all Special Forces of the three services under one command and control structure.
- ✓ This will ensure resource optimisation as well as streamlining operational planning for smooth execution of operations.

# **MISCELLANIOUS**

# 1. A FIRST FOR INDIA: MUMBAI WOMAN FLIES LIGHT PLANE ACROSS ATLANTIC

#### **CONTEXT**

Aarohi pandit has been glued to her iPhone and MacBook, binge-watching movies and documentaries over the past 10 months. Not unusual for a 23 year old, except these distractions come during the breaks in a mission unlike and undertaken by Indian women.

After clock 120 hours of flying across 18 countries and 37,000 km over the past ten months, **Aarohi made history on May 13, 2019**, when she landed at the Iqaluit airport in Canada to become the first Indian woman and perhaps the only woman in the world to cross the Atlantic Ocean, solo in a light sport craft.

# **The Aircraft**

The Sinus 912 she files is an eco-friendly ultralight plane which happens to be the first light sports aircraft registered in India. Built in Slovenia in 2016, it weighs less than a family of four and is meant to be exceptionally fuel efficient. Formally registered as VT=NBE, the lane was named **Mahi** (great planet Earth in Sanskrit). "It is a single engine, two – seater with a high wing and tricycle design. It strutless motor glider is made for glidding and quipped with a ballistic parachute in case of emergency landing, a glass cockpit with advanced avionics and special satellite trackers," said Lynn de Souza, founder of **Social Access Communications** that conceived and executed the expedition.

"I'm so honoured and grateful that I could do this for my country and for women everywhere. Flying over the Atlantic Ocean has been a humbling experience, she said.

# 2. PEPSICO SUES POTATO FARMERS

#### **CONTEXT**

Recently, PepsiCo sued some farmers from Gujarat asking them to pay Rs. 1.05 crore for alleged violation of Intellectual Property Rights. Later the company withdrew its suit.

#### **HIGHLIGHTS IN THE NEWS**

- PepsiCo has registered two hybrid potato varieties FL 1867 and FL 2027 under the Protection of Plant Varieties and Farmer's Rights (PPV & FR) Act, 2001 in 2016.
- The Company has said that farmers infringed its patent rights by illegally growing its potato variety registered under the Protection of Plant Varieties and Farmers' Rights (PPV & FR) Act, 2001.

# **BACKGROUND**

The breeding activities and exploitation of new varieties are the decisive factors for improving rural income. It is important to provide an effective system of plant variety protection with an aim to encourage the development of new varieties of plants for the benefit of society.

Engaging debates were held in the country on how intellectual property rights should be introduced in Indian agriculture after the country jointed the World Trade Organisation in 1995 and agreed to implement the Agreement on Trade- Related Aspects of Intellectual Property Rights (TRIPS).

The choice before India was to either enact a law that protected the interests of farming communities or to accept the framework of plant breeders' rights given by the International **Union for Protection of New Plant** Varieties (**UPOV Convention**). The latter option was rejected primarily it denies the farmers the freedom to reuse farm – saved seeds.

The Government of India enacted 'The Protection of Plant Varieties and Farmers' Rights (PPV & FR) Act, 2001' adopting *sui generis system*.

The legislation recognizes the contributions of both commercial plant breeders and farmers in plant breeding activity and also provides to implement TRIPs in a way that supports the specific socio – economic interests of all the stakeholders.

### <u>Protection of Plant Varieties and Farmer's Rights (PPV & FR) Act, 2001</u>

# Objectives of the Act

- Establish an effective system for the protection of plant varieties and rights of plant breeders.
- Protect the rights of farmers for their contributions towards conserving, improving and making available plant genetic resources for the development of new plant varieties.
- Accelerate agricultural development and stimulate research for the development new of plant varieties.
- Facilitate the growth of seed industry to ensure the availability of high quality seeds and planting material.

# Rights under the Act

- **Breeders' Rights:** Exclusive rights to produce, sell, distribute, import or export the protected variety. Breeder can appoint agent and may exercise for civil remedy in case of infringement of rights.
- Farmers' Rights: A farmer who has developed a new variety; a farmer cans ave, use, sow, share or sell his farm produce including seed of a protected variety except the sale of a branded seed of a protected variety; and farmers can get compensation for non-performance of a variety.
- Researchers' Rights: Use any of the registered variety for conducting experiment or research.

#### Protection of Plant Varieties and Farmers' Rights Authority

To implement the provisions of the Act, the Ministry of Agriculture and Farmers Welfare established the Protection of Plant Varieties and Farmers' Rights Authority in 2005. The Authority comprises chairperson and 15 members. General functions of the Authority include — registration of plant varieties; developing DUS (Distinctiveness, Uniformity and Stability) test guidelines for new plant species; maintenance of the National Register of Plant Varieties; maintenance of National Gene Bank etc.

- Registration of Variety: A variety is eligible for registration under the act if it essentially fulfils the criteria of Distinctiveness, Uniformity and Stability (DUS). The Central Government issues for the purpose of registration of varieties. So far, more than 150 crop species have been notified for the purpose of registration.
- ↓ Validity of Registration: The certificate of registration remains valid for nine years in case of trees and vines and six years in case of other crops. It may be renewed on payment of renewal fees. However, the total period of validity shall not exceed eighteen years in case of trees and vines and fifteen years in other cases.

- Reasonable Seed Price: Farmers have the right to access seed of registered varieties at a reasonable price. When this condition is not met, the breeder's exclusive right over the variety is suspended under the provisions concerning compulsory licensing, and the breeder is obligated to license the seed production, distribution and sales of the variety to a competent legal entity.
- **♣ Benefit Sharing:** Plant breeders and legal entities including farmers who provide Plant Genetic Resources (PGR) to breeders for developing new varieties shall receive a fair share of benefit from the commercial gains of the registered varieties.
- ♣ **Rights of Community:** It is compensation to village or local communities for their significant contribution in the evolution of variety which has been registered under the Act. Any person/group of persons, on behalf of any village/local community in India, can file a claim for contribution in the evolution of any variety.

# <u>INTERNATIONAL UNION FOR PROTECTION OF NEW</u> <u>PLANT VARIETIES (UPOV)</u>

The UPOV is an intergovernmental organization with headquarters in Geneva (Switzerland). UPOV was established by the International Convention for the Protection of New Varieties of Plants. The Convention was adopted in Paris in 1961 and it was revised in 1972, 1978 and 1991.

UPOV's mission is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society. The UPOV Convention provides the basis for members to encourage plant breeding by granting breeders of new plant varieties and intellectual property right: the breeder's right.

In the case of a variety protected by a breeder's right, the authorization of the breeder is required to propagate the variety for commercial purposes. The breeder's right is granted by the individual UPOV members. Only the breeder of a new plant variety can protect that new plant variety. It is not permitted for someone other than the breeder to obtain protection of a variety.

There are no restrictions on who can be considered to be a breeder under the UPOV system: a breeder might be an individual, a farmer, a researcher, a public institute, a private company etc. India is **not** a member.

# 3. NEW STANDARDS FOR KILOGRAM, KELVIN, AMPERE AND MOLE

#### CONTEXT

Recently, the CSIR-National Physical laboratory (NPL), which is India's official reference keeper of units of measurements, released a set of recommendations to update the definitions of the kilogram, Ampere, Kelvin and Mole.

#### **BACKGROUND**

In 1791, one kg was defined as the mass of one litre of distilled water at its melting point. But in 1799, the kilogram was represented by a solid cylinder of platinum. It was superseded in 1889 by a standard kilogram, also a solid cylinder, of height equal to its diameter, made of the same platinum- iridium alloy as the bar, known as Le Grand K, or International Prototype Kilogram (IPK).

UNIT	QUANTITY	HOW IT IS/WILL BE DEFINED
Meter*	Distance	Based on speed of light
Kilogram**	Mass	To be based on Planck constant
Second*	Time	Based on radiation of caesium-133 atom
Ampere**	Current	To be based on an electron's charge
Kelvin**	Temperature	To be based on Boltzmann constant
Mole**	Amount of substance	To be based on Avogadro constant
Candela*	Luminous intensity	From efficacy of light of specific frequency
e lenere d		*Current definition stands ** Being redefined

# **HIGHLIGHTS IN THE NEWS**

- The IPK was the last physical artefact used to define any of the fundamental units.
- The standard kilogram was kept at the International Bureau of Weights and Measures (BIPM)
  laboratory at Sevres, France.
- In India, National Physical laboratory (NPL) maintains the National Prototype Kilogram (NPK-57), which is calibrated with IPK.
- However, it was discovered that the prototype kept at Sevres was 50 micrograms lighter than other copies of the standard kilogram.
- To avoid the problem of having the kilogram defined by an object with a changing mass, the General Conference on Weights and Measures (CGPM) agreed in 2011 to a proposal to begin to redefine the kilogram not by a physical artefact but by a fundamental physical constant.
- In November 2018, following a vote at BI PM, representatives of 60 countries agreed that the kilogram along with other three fundamental units-Amperes (current), the Kelvin (temperature) and the Mole (amount of substance) should be redefined by fundamental physical constants.

# **ART & CULTURE**

# 1. PATTACHITRA PAINTING

#### CONTEXT

Cyclon Fani has damaged many pieces of **Pattachitra paintings** in coastal district of Puri. Pattachitra of painting is one of the oldest and most popular art forms of Odisha.



#### **HIGHLIGHTS IN THE NEWS**

- The name 'Pattachitra' has evolved from the Sanskrit words *Patta*, meaning canvas, and *Chitra*, meaning picture.
- Pattachitra is thus a painting done on canvas and is manifested by rich colourful application, creative motifs and designs, and portrayal of simple themes, mostly mythological in depiction.
- Some of the popular themes represented through this art form are **Thia Badhia** depiction of the temple of Jagannath; **Krishna Lila** enactment of Jagannath as Lord Krishna displaying his powers as a child; **Dasabatara Patti** the ten incarnationas of Lord Vishnu; **Panchamukhi** depiction of Lord Ganesh as a five-headed deity.

# 2. KALAMKARI

#### CONTEXT

Kalamkari is a popular hand – painted or block-printed cotton textile art practised in Andhra Pradesh.

### **HIGHLIGHTS IN THE NEWS**

• Kalamkari represents a unique art of painting cotton fabrics with a kalam (pen) which is generally done using a sharp, pointed pierced bamboo which regulates the flow of colour on the fabric.

• The name 'Kalamkari' originates from two Persian words, name *Qalam*(pen) and *Kari* (craftsmanship).



- Kalamkari art is considered unique as it uses natural colours as a vibrant medium for portraying mythological characters from epics like Ramayana and Mahabharat.
- There are two identifiable styles of Kalamkari art-**Srikalahasti** style (Chittoor district) and **Machilipatnam** style (Krishna district).
- In the Machilipatnam style of Kalamkari, motifs are essentially printed with hand-carved traditional blocks with intricate detailing painted by hands.
- On the other hand, Srikalahasti style of painting draws inspiration from the Hindu mythology describing scenes from the epics and folklore.

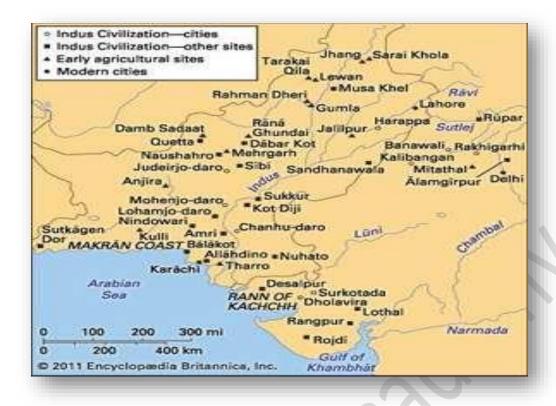
# 3. LATE HARAPPAN SITE AT SANAULI

#### **CONTEXT**

The Archaeological Survey of India's (ASI) excavation of 4,000 –year old burial sites in Uttar Pradesh's Sanauli has unearthed **Underground sacred chamber, decorated legged coffins** as well as **rice and dal** in pots and **animal bones buried with the bodies.** 

#### HIGHLIGHTS IN THE NEWS

- The findings are important to understand the culture pattern of the Upper Ganga-Yamuna Doab.
- The discovery implies that it is different from the Harappan culture and is contemporary to the last phase of the mature Harappan culture.



- The excavations at Sanauli has brought to light the largest necropolis of the late Harappan period datable to around early part of the second millennium BCE.
- The discovery points towards the existence of a 'warrior class in the area around 2,000 BCE' and this would challenge some of the basic premises of the Aryan invasion theory that claim that horses were brought in by the invading Aryan army around 1500 to 1000 BC.
- Chariots pulled by horses had given the Aryans the edge over the Dravidians and the power to conquer the North Indian plains by pushing them to the south of the peninsula.

# 4. SRI VEDANTA DESIKAN

#### **CONTEXT**

Recently, the Vice President released a **postage stamp** to commemorate the **750**<sup>th</sup> **birth** anniversary of Sri Vedanta Desikan.

#### HIGHLIGHTS IN THE NEWS

- Shri Vedanta Desikan was one of the most prominent preceptors in the **SriVaishnava tradition** and one of the most effulgent luminaries of South India.
- He followed the philosophy of Ramanuja's Vishishtadvaita (Qualified non-dualism).
- Vishishtadvaita is Advaita with some amendments.

#### **BACKGROUND**

While it accepts 'Brahman' as the unified whole, it states He is characterized by multiple forms. He had authored brilliant poems, prose, drama, epics, commentaries, scientific texts and philosophical treatises in Sanskrit, Tamil, Prakrit and Manipravalam.

His philosophy was based on inclusion, where anyone irrespective of caste and creed could join the Sri Vaishnava fold. He also expressed his genius in the field of arts and sciences through other works such as:

- **Aahaara Niyamam** that detailed how different food items help in maintaining a healthy mind and a disease free life.
- **Subhashita Neevi** contains a fund of moral and ethical advice which is relevant and practical.
- Silpartha –saram-a treatise on sculpture.
- Bhugola-nirnayam a research text on geography.

# 5. Khyal

#### CONTEXT

Khyal is a form Hindustani Classical Music. The word 'Khyal' is derived from Persian and means "idea or imagination".

#### HIGHLIGHTS IN THE NEWS

- It is said that Amir Khusrou in the 13<sup>th</sup> century gave it an impetus.
- Sultan Mohammed Sharkhi of the 15<sup>th</sup> century is credited with encouraging this form. However, it attained its maturity at the hands of Niyamat Khan Sadarang and Adarang of the 18<sup>th</sup> century
- The Khyal has two varieties: the slow or Vilambit Khyal and the fast or Drut Khyal.
- The Vilambit is sung in slow tempo and the Drut at a faster speed.
- Both types of Khyals have **two sections** :Asthayee and Antara.Together Asthayee and Antara make one song, a composition, or bandish.
- Both types of Khyals have two sections: Asthayee and Antara. Together Asthayee and Antara make one song, a composition, or bandish.
- Usually, the theme for Khyal bandish is romatic in nature.
- The major Gharanas (schools) under Khyal music are **Gwalior** Gharana, **Agra** Gharana, **Jaipur Atroli** Gharana, **and Rampur Sajeswam** *Gharana*.

# 6. Thumri

#### **CONTEXT**

Thumri is based on mixed ragas and is commonly considered to be **semi-classical Indian** music.

#### HIGHLIGHTS IN THE NEWS

- The compositions are romantic or devotional in nature. This was inspired by the Bhakti movement.
- As Thumri is a love song and hence the textual beauty is very important. This is **closely** coordinated with the musical rendition.
- The language of the composition is usually Hindi or Awadhi dialect or the Braj Bhasha dialect and the grammar is not strictly adhered in Thuri.
- There are two styles of *Thumri* singing; the **Poorab or Banaras which is fairly slow** and staid and the **Punjab style which is more mercurial.**

# **SOCIAL ISSUES**

# 1. THE GENDER LADDER TO SOCIO-ECONOMIC TRANSFORMATION

#### CONTEXT

For the past few decades and especially in the last few years, Indian women have taken a great stride in all fields of activity. Yet, a lot remains to be achieved. An unprecedented focus on women's employment in this year's general elections is what made the news.

# Trends in workforce participation

- ✓ Currently the participation of women in the workforce in India is one of the lowest globally.
- ✓ The Female Labour Force Participation Rate (LFPR) in India fell from 31.2% in 2011-2012 to 23.3% in 2017-2018.
- ✓ This decline has been sharper in rural areas, where the female LFPR fell by more than 11% in 2017-2018
- ✓ This fall in workforce participation can be attributed to a complex set of factors including:
- ✓ low social acceptability of women working outside the household;
- ✓ lack of access to safe and secure workspaces;
- ✓ widespread prevalence of poor and unequal wages;
- ✓ a dearth of decent and suitable jobs;
- ✓ Most women in India are engaged in substance level work in agriculture in rural areas, and in low paying jobs such as domestic service and petty home based manufacturing in urban areas.

# **Education and work**

- ✓ A recent study observed negative relationship between a woman's education level and her participation in agricultural and non-agricultural wage work and in family farms.
- ✓ Essentially, women with moderately high levels of education do not want to do manual labour outside the household which would be perceived to be below their educational qualifications.
- ✓ The study also showed a preference among women for salaried jobs as their educational attainment increases; but such jobs remain extremely limited for women.

✓ It is estimated that among people (25 to 59 years ) working as farmers, farm labourers and service workers, nearly a third are women, while the proportion of women among professionals, managers and clerical workers is only about 15% (NSSO, 2011-2012).

# **Burden of unpaid work**

- ✓ Surveys have found that women devote a substantial amount of their time to work which is not considered as work, but an extension of their duties, and is largely unpaid.
- ✓ This includes unpaid care work such as childcare, elderly care, and household chores such as collecting water.
- ✓ It also encompasses significant chunks of women's contribution to agriculture, animal husbandry, and non-timber forest produce on which most of the household production and consumption is based.
- ✓ The incidence and drudgery (hard monotonous routine work) of this unpaid labour is growing. Also, the burden of these activities falls disproportionately on women, especially in the absence of adequately available or accessible public services.

### Migrant women workers

- ✓ Women have expressed the need for policies which ensure safe and dignified working and living conditions for migrant workers.
- ✓ In cities, governments must set up migration facilitation and crisis centres (temporary shelter facility, helpline, legal aid, and medical and counselling facilities.
- ✓ They must also allocate social housing spaces for women workers, which include rental housing and hostels.
- ✓ They must ensure spaces for women shopkeepers and hawkers in all markets and vending zones.
- ✓ On the question of work, women's demands include gender responsive public services such as free and accessible public toilets, household water connections, safe and secure public transport, and adequate lighting and CCTV cameras to prevent violence against women in public spaces and to increase their mobility.
- ✓ Furthermore, they want fair and decent living wages and appropriate social security including maternity benefit, sickness benefit, provident fund and pension.

# Women to be recognized as farmers

- ✓ Women have strongly articulated the need to enumerate and remunerate the unpaid and underpaid work they undertake in sectors such as agriculture and fisheries.
- ✓ Their fundamental demand is that women must be recognised as farmers in accordance with the Nation Policy for Farmers; this should include cultivators, agricultural labourers, pastoralists, livestock rearers, forest workers, fish workers, and salt pan workers.
- ✓ Thereafter, their equal rights and entitlements over land and access to inputs, credit, markets, and extension services must be ensured.

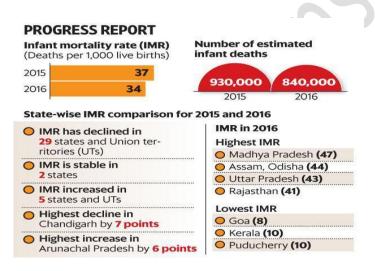
#### CONCLUSION

- Any government which is serious about ensuring women's economic empowerment and equal access to livelihoods must address the numerous challenges that exist along this highly gendered continuum of unpaid, underpaid and paid work.
- A two-pronged approach must entail facilitating women's access to decent work by providing public services, eliminating discrimination in hiring, ensuring equal and decent wages, and improving women's security in public spaces.
- Government must also recognise, reduce, redistribute, and remunerate women's unpaid work. For this, the government must collect sex-disaggregated household level data with suitable parameters.
- ♣ Unless policy makers correctly assess and address the structural issues which keep women from entering and staying in the workforce, promising more jobs while a welcome step-is unlikely to lead to the socio-economic transformation India needs.

# 2. UNDER – 5 MORTALITY RATE IN INDIA: DISPARITY AMONG STATES

#### **CONTEXT**

A recent study has flagged the deaths among children under five in India, which was higher than in any other country in 2015.



to at least as low as 25 deaths per 1,000 live births.

#### **BACKGROUND**

The United Nations Millennium Development Goals (MDG)set in 2000 was to reduce the under-five mortality rate in 2015 to one-third of the 1990 figure. The Sustainable Development Goals (SDGs) target for child mortality aims to end, by 2030, preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 deaths per. 1,000 live births and under-5 mortality

# Private, Public and Political Mortality

• The election process that concluded recently again highlighted the need of morality in private, public and political spheres of one's life.

#### The three spheres of mortality

- Private, public and political mortality are related, but not identical.
- While in personal life one can be partial, the political domain requires impartial or just use of power because in the larger public domain one faces people with different religiophilosophical sensibilities.
- The lineage of these three spheres of morality (i.e.private, public and political) can be traced to ancient times. For example, Asoka's Dhamma speaks eithics in three distinct domains.

### **Interpersonal mortality**

• Each of us has special obligations to our relatives and acquaintances. We have a duty towards those under our special care, including the aged, servants, animals among others.

# **Public mortality**

• There should be harmony between different religious – philosophical groups. It should be handled by the exercise of sayamam (self-restraint) and vacaguti(controlling one's tongue to criticise or praise others only if there is good reason to do so and always moderately).

# <u>Political mortality</u>

- A ruler is obliged to ensure *janahita* (the good of all) and *janasukham*(happiness not only in this life but also in the afterlife). To achieve this, rulers must display *damdasamata* and *viyohalasamata* i.e. impartially in politico-legal acts.
- Two thousand years later, the German philosopher Friedrich Hegel made similar points. He distinguished three spheres of human life: family, civil society and the state.
- The family life is the smallest community in which the identity of its members is fused. A family is bound by emotional ties, by mutual love and affection. Morality here is guided by unarticulated feelings.
- Within the civil society each person acts as an individual with a sharply defined sense of her own interests which are distinct from that of the others. Each individual devises her own personal, subjective moral maxims.
- As citizens of a state, i.e. part of a political community, people must be bound together neither by feelings nor by self-interest but by a commitment to common values (like freedom, solidarity etc.). Furthermore, those who wield political power must realise that their actions affect the lives of a large number of people.

#### **WAY FORWARD**

- Most humans are complex moral agents. To have our private and political moralities aligned with the highest moral standards will be great.
- But in a non-ideal we can only hope that while leading a life in politics one will at least follow minimum norms of political morality even as they fail to be scrupulously moral in their private lives.

# **SPORTS**

# 1. G.S LAKSHMI BECOMES IST EVER FEMALE ICC MATCH- REFEREE

# CONTEXT

Former India woman cricketer G. S. Laxmi became the first female to be appointed to the ICC (International Cricket Council) International Panel of Match Referees. The 51-year old, who first officiated as a match referee in domestic women's cricket in 2008-09, has



"To be selected in the international panel by the ICC is a huge honour for me as it opens up new avenues. I have had a long career as a cricketer in India and also as a Match Referee. I hope to put my experience both as a player and as a much official to good use on the international circuit," Laxmi said.

# 2. ICC LAUNCHES CRIIIO CAMPAIGN ON EVE OF MEN'S WORLD CUP

The International Cricket Council (ICC) launched the Criiio campaign on the eve of Men's World Cup. The initiative will bring together around 460 million people playing cricket globally to celebrate magnificent diversity of cricket.

For the first time in the World Cup history, each participating team at upcoming ICC World Cup 2019 will have a dedicated anti-corruption officer attached with it. The move is to deliver a corruption –free tournament. Dedicated anti-corruption officer attached with it. The move is to deliver a corruption – free tournament.

# What is the Criiio campaign?

It is a celebration of all brilliant and unique ways people play cricket game which can be played by anyone, anywhere and at any time. Around the world millions of fans are play cricket way they like to such as on their backyard, on beach, in a car park or gully.

The ICC has asked cricket fans globally to join the social cricket tribe by sharing their pictures and videos about where and how they play cricket by using the newly launched hashtag# criiio and visiting the stie: criiio.com.

This is the first of a series of programs that will be launched by the ICC over the next 12 months and is built on the success of recent user-generated social media initiative called # World Wide Wickets.

# 3. ISSF WORLD CUP RIFLE: APURVI CHANDELA WINS GOLD.





India's Apurvi Chandela won gold in women's 10m Air Rifle at ISSF World Cup Rifle held in Munich, Germany.

#### **HIGHLIGHTS IN THE NEWS**

 Apurvi Chandela beat Wang Luyao of China with a score of 251 to win gold medal in 10m Air Rifle event at the 2019 third International Shooting Sport Federation (ISSF) World Cup Rifle/Pistol

stage held in Munch (Germany).

# 4. ITALIAN OPEN 2019: RAFAEL NADAL WON MEN'S SINGHLES TITIE

#### CONTEXT

Rafael Nadal of Spain defeat Novak Djokovich of Serbia in finals to win the men's singles title at Italian Open 2019, held in Rome. This was his ninth title in Rome.

Czech Republic's Karolina Pliskova beat United Kingdom's Johanna Konta in the finals to win the women's singles titles.

# <u>Italian Open</u>

It is a tennis tournament which is held in Rome, Italy. It was found in 1930. The event is also known as Rome Masters (for male edition) or International BNL d' Italia(sponsored name) or Italian Championships. The tournament is played on Clay Courts, a type of tennis court which are made of crushed brick, stone, shale, or other unbound mineral aggregates. French Open is also played in Clay Courts.

# **IN NEWS**

# 1. PENNY WONG



The Malaysian – born, gay Australian senator is the race to become the next foreign minister. In 2013, she was the first woman to be elected as the leader of the government in the Senate and to become the leader of the opposition in the Senate after her party lost elections the same year. Her elevation to the post of foreign minister would be an important signal to the rest of the world about Australia's multicultural values a nation often reminded of its past racial attitudes.

# 2. JOKO WIDODO

Mr. Joko Widodo was re-elected as the President of Indianesia, the third-biggest democracy in the world, defeating hard-line former General Prabowo Subianto.

# 3. KING MAHA VAJIA LONGKORN BODINDRADEBAYAVARANGKUN

King Maha Vajiralongkorn Bodindradebayavarangkun (King Rama X) of Thailand was officially crowned as the 10<sup>th</sup> king of the chakri dynasty on May 4, after taking the throne following the death of his father, King Bhumibol Adulyadej, in late 2016.

In a tradition dating to the 18<sup>th</sup> century, the Chakri kings have held the formal title Rama, after an avatar of Hindu god Vishnu in the ancient Indian epic the Ramayana.

# 4. I.M PEI

I M Pei, the preeminent US architect who forged a distinct brand of modern building design with his sharp lines and stark structures, has died at the age of 102 years. He was the mastermind behind the **Louvre pyramid in Paris**, the landmark 72-story Bank of China tower in Hong Kong and Athens Museum of Modern Art.

# **AWARDS**

# 1. JOKHA ALHARTHI'S NOVEL "CELESTIAL BODIES" WINS MAN BOOKER INTERNATIONAL PRIZE CONTEXT



Omani novelist Jokha Alharthi's "Celestial Bodies", a nice family portrait set against Oman's transition from slave trading centre to oil producing nation, became the first novel originally written in Arabic to win the Man Booker International Prize.

The book's author, Jokha Alharthi of Oman, shares the award of £ 50,000 pounds (about \$ 63,000) with its translator, Marilyn Booth. The prize, given each year to the best book translated into English and published in Britain, is widely seen as the world's most significant award for translated fiction.

The Man Booker International Prize is distinct from the Booker Prize, for fiction originally published in English. Alharthi's novel 'Celestial Bodies' was first published in 2010 as 'Ladies of the Moon'. Bettany Hughes was the chairwoman of the award-jury. She called 'Celestial Bodies' a book to win over the head and the heart in equal measure.

# 2. UNESCO WORLD PRESS FREEDOM PRIZE, 2019

#### CONTEXT

Two Reuter's journalists **Wa Lone** and **Kyaw Soe Oo** of Myanmar were honoured with the UNESCO Guillermo Cano World Press Freedom Prize, 2019 on May 2, 2019 in Ethiopia for their reporting on alleged human rights violations in Rakhine state of Myanmar.

Both the reporters were in Myanmar jail for breaking country's secrets law. They were released on May 6, 2019 under a general amnesty from the Myanmar President. Both the journalists courageously reported military's brutal crackdown and killings of Rohingya Muslims in Rakhine state of Myanmar.

The \$ 25,000 World Press Freedom Prize was instituted in 1997 in memory of Guillermo Cano Isaza, a Colombian Journalist who was gunned down outside his office in 1986 in Bogota, Colombia.

#### 3. 72<sup>ND</sup> CANNES FILM FESTIVAL AWARDS

#### CONTEXT

South Korean director Bong Joon-ho was honoured with the prestigious Palms d'Or honour for the best film, the top honour at the Cannes Film Festival, for his critically-acclaimed black comic thriller 'Parasite' on May 25, 2019 at Cannes in France.

#### HIGHLIGHTS IN THE NEWS

- Eminent Latin-American filmmaker Alejandro Gonzalez Ina 2rritu, the award Jury-President called 'Parasite' 'a unique experience'.
- The movie was the unanimous choice of the award jury for top honour at the Cannes Film Festival, 2019.
- 'Parastite' is a film about a poor family who insinuate themselves as servants into a much richer one.
- Bong is the first Korean filmmaker to have clinched the Palmed d'Or.
- The Cannes Film Festival Grand Prix honour, considered as the runner up award, went to Senegalese director 'Mati Diop' for her film Atlantique which is a supernatural drama about African migrants.
- Jean-Pierre and Luc Dardenne won the Best Director honour for the film Young Ahmed.

Alenjandro Inarritu presided over a jury that included French author-artist director Enki Bilai, French director Robin Campillo, Sengegalese actress-director Maimouna N'Diaye, American actress Elle Fanning, Greek director Yorgos Lanthimos, Polish director Pawel Pawlikowski, American director Kelly Reichardt and Italian director Aliace Rohrwacher.

The Camera d'Or, awarded by a Special Jury headed by Cambodian docmaker Rithy Panh to the best first film from among 26 debut features across all section of the festival, went to Guatemalan director Cesar Diaz for his drama 'Our Mothers'.

72<sup>nd</sup> Cannes Film Festival was organised at Cannes in France with full filmy fervour and zeal at international level. The festival opened with American director **Jim Jarmusch's** zomble comedy – **The Dead Don't Die** while the festival ended with the screening of a French comedy **The Specials** directed by **Olivier Nakache** and Eric Toledano.

# 72<sup>nd</sup> Cannes Film Festival : Major Winners

Palme d'Or (for Best Film): Parasite (directed by Bong Joon-ho)

**Grand Prix Atlantique** (directed by Mati Diop)

Best Director: Jean-Pierre and Luc Dardenne for Young Ahmed

Best Actor: Antonio Banderas for Pain and Glory

Best Actress: Emily Beecham for Little Joe

Jury Prize (ex aqueo) : Les Miserables (directed by Ladj Ly) ; Bacurau

(directed by Juliano Dornelles and Kleber Mendonca Filho)

**Special Mention**: (Elia Suleiman for It Must Be Heaven Camera d'Or: Our Mothers (directed by Cesar Diaz)

# 4. Man booker International Prize

Omani author **Jokha Alharthi** has won the Man Booker International Prize 2019 for her novel "**Celestial Bodies**" which reveals her Omani homeland's post-colonial transformation. She became the first Arabic author to win the Man booker international prize. She shares the award of £50,000 with her translator, the American academic **Merlin Booth.** 

The International Booker Prize is awarded annually for a single book, translated into English and published in the UK or Ireland.

# 5. UN SASAKAWA AWARD 2017

United Nations Office for Disaster Risk Reduction (UNDRR) conferred Sasakawa Award 2019 for **Disaster Risk Reduction** to **Dr. Pramod Kumar Mishra**(Additional Principal Secretary to Prime Minister of India) in recognition of his long-term dedication to improve the resilience of communities exposed to disaster.

The United Nations Sasakawa Award is the most prestigious International award in the area of Disaster Risk Management. It was instituted in 1986 and is jointly organized by the UNDRR and

the Nippon Foundation. A total grant of USD \$ 50,000 is distributed among the winners which can be either organizing or individuals. The theme of the 2019 Sasakawa award was "Building Inclusive and Resilient Societies".

# **PLACES IN NEWS**

# BUKKAPATNA (KARNATAKA)

Nearly 148-45 sq. km of forests in Bukkapatna in Tumkuru district of Karnataka has officially been declared as a Chinkara Wildlife Santuary, Making it only the second protected area for the conservation of the rare antelope in the state, Forests in Bukkapatna are unique as three types of antelopes – for horned, blackbuck and Chinkara –are found here.

# KUALA LUMPUR (MALAYSIA)

Kuala Lampur, the capital of Malaysia was nemed World Book Capital for the year 2020 by Director – General of UNESCO, Audrey Azoulay, on the recommendation of the World Book Capital Advisory Committee. It is the 20<sup>th</sup> city since 2001 in the world to be declared the World Book Capital.

Kuala Lumpur's role as the World Book Capital will start on April 23, 2020,on the World Book and Copyright Day. At present Sharjaj in the UAE is the World Book Capital for 2019. New Delhi has been the UNESCO's World Book Capital for the year 2003. Cities designated as UNESCO World Book Capital undertake to promote books and reading and to organize activities over the year.

# **QUICK REVISION**

# Who has been appointed as the chairperson of NBSA?

Former Supreme Court judge Justice Arjan Kumar Sikri has been appointed chairperson of the News Broadcasting Standards Authority (NBSA). He succeeds Justice R.V. Raveendran on the top NBSA post. Justice Sikri served as the Supreme Court Judge from April 2013 to March 2019. The NBSA is a self –regulatory body that implements the 'Code of Ethics and Broadcasting standards and Guidelines' for its member news broadcasters.

#### • Which Indian State listed the Masala listed the Masala bonds at London stock exchange?

Kerala became the first sub – sovereign entity in India to access the international bond market when the state- owned Kerala Infrastructure Investment Fund Board (KIIFB) debuted its masala bond issue at the London stock Exchange on May 17, 2019. The resources earned through these bonds would be channelized for funding a clutch of infrastructure development projects of KIFB. Masala bonds are debt papers sold overseas by an Indian entity that are denominated in

rupees. KIIFB has already raised Rs. 2,150 crore through the masala bonds at a fixed interest rate of 9.723% per annum.

# • India successfully launched a radar imaging earth observation satellite named?

Indian Space Research Organisation (ISRO) on May 22, 2019 successfully launched radar imaging earth observation satellite RISAT-2B onboard PSLV —C46 rocket from Sriharikota. Dubbed as a 'spy' satellite, RISAT-2B will replace its predecessor RISAT-2,RISAT-2B is equipped with a synthetic aperture radar that can take pictures of the earth during day and night, and even under cloudy conditions with a mission life of five years, RISAT — 2B will also be used for military surveillance for India. This is the third Indian RISAT in 10 years, and follows the Israeli-built RISAT-2 in 2009 and the ISRO built RISAT -1 in 2012.

# • What is India's rank on the IMD' world competitiveness rankings, 2019?

India moved up one place to 43<sup>rd</sup> rank as the most competitive economy in the world on the 2019 World Competitiveness Rankings, compiled and released by Switzerland – based business school IMD on May 29, 2019. Last year India was on 44<sup>th</sup> position in the ranking. India's one spot gain this year is driven by a robust rate of growth in real GDP, improvements in business legislation and an increase in public expenditure on education. Singapore emerged on top of the ranking as the world's most competitive economy. Hong Kong SAR and the USA were adjudged the second and third most competitive economies in the world respectively this year.

# Who scaled Mount Everest for record 24<sup>th</sup> time?

Kami Rita Sherpa, Veteran Nepalese mountaineer improved his own world record of climbing Mount Everest on May 21, 2019 when he scaled it for record 24<sup>th</sup> time. Kami Rita clinched the world record of climbing Everest, the highest peak of the world, for most of the time with his 22<sup>nd</sup> climb last year. He further bettered his own world record with the peak climb twice in May, this year. He scaled it 23<sup>rd</sup> time on May 15 and he again conquered the 8,848 metre peak for 24<sup>th</sup> time on May 21. He has been climbing Mount Everest since 1994. He has already scaled most of the peaks that are above the 8,000 metre altitude level, including K2, Cho Oyu, Lhotse and Annapurna.

# • Which country has become the first country to declare 'an environment and climate emergency"?

The United Kingdom became the first country in the world to declare an environment and climate emergency when the UK Parliament gave its approval to a motion for this purpose on May 01,2019. Labour Party leader Jeremy Corbyn tabled the motion in the Parliament. The declaration, which does not legally compel the British government to act, came after huge protests by environmental activist group 'Extinction Rebellion'. After the British Parliament, Ireland's Parliament also declared the climate emergency in the country on May 9.



# Which is the first place in Asia where same sex marriage has been legalised?

Taiwan has become the first place in Asia to legalise same-sex marriage when Taiwanese Parliament on May 17, 2019 gave its approval to the same —sex marriage bill. Democratic Progressive Party (DPP) law makers backed the bill in the Parliament and the bill was passed in the Parliament with 66 votes in its support while 27 votes went against it. The 'Bill' offers same —sex couples similar legal protections for marriage in Taiwan as hetero-sexuals get.

# For ISRO Chief A.S. Kiran Kumar gets which top civilian honour?

Former Indian Space Research Organisation (ISRO) Chairman A.S. Kiran Kumar was honoured with France's highest Civilian Decoration Chevalier de I' order national de La Legion d'Honneur (National order of the Legion of Honour). France's ambassador to India Alexandre Ziegler presented the honour to Mr. Kiran Kumar on behalf of French President at an award ceremony in New Delhi as an acknowledgement to his outstanding contribution in fostering historic space cooperation between India and France. Created in 1802 by Napoleon Bonaparte, the honour is the highest civilian honour of the French government.

# **IMPORTANT DATES & EVENTS**

# 18 April 2019

The Reporters Without Borders (RSF) released the World Press Freedom Index 2019, reflecting growing animosity towards journalists. India's rank in the World Press Freedom Index 2019 dropped down to 140<sup>th</sup> from 138<sup>th</sup> in 2018, two points below the previous year.

#### • 22 April 2019



Global warming has caused the Indian economy to be 31 per cent cent smaller than it would otherwise have been, according to a Stanford study which shows how Earth's temperature changes have increased.

#### • 23 April 2019

- The RBI divested its remaining stake in the National Bank for Agriculture and Rural Development and National Housing Bank in February and March this year.
  - ❖ Beijing plans to send a manned mission to the moon and to build a research station there within the next decade.
  - ❖ The American space agency's In sight lander appears to have detected its first seismic event on Mars.
  - \* Researchers in Germany created transparent human organs using a new technology that could pave the way to print three-dimensional body parts such as kidneys for transplants.

#### • 24 April 2019

North Korean leader Kim Jong Un crossed the border into Russia for a first summit with Vladimir Putin, as Pyongyang seeks closer ties with its traditional ally amid a nuclear deadlock with the United States.

#### 25 April 2019

India skipped China's 2<sup>nd</sup> Belt and Road Forum (BRF) held from April 25 to 27 aimed at showcasing its trillion – dollar Belt and Road Initiative (BRI) over its objection to USD 60 billion China-Pakistan Economic Corridor (CPEC) which through Pakistan – occupied Kashmir (PoK).

#### • 26 April 2019

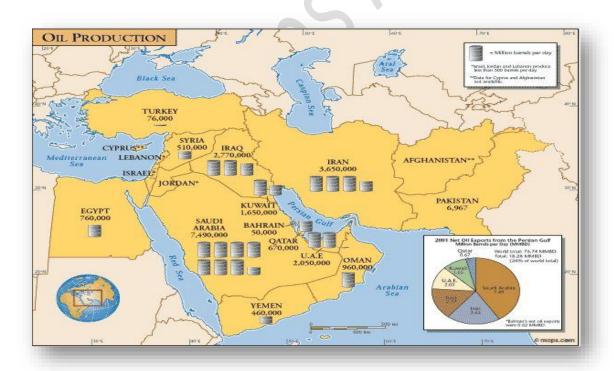
The Supreme Court gave the Reserve Bank of India "a last opportunity" to withdraw a November 2016 Disclosure Policy to the extent to which it stonewalls revelation of every other kind of information under the Right to Information Act, including the list of wilful defaulters and annual inspection reports.

#### 29 April 2019

An international team led by the Hyderabad – based International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) identified in chickpea four important genes for heat tolerance and three important genes for drought tolerance.

# 1 May 2019

- ❖ A new round of peace talks between the Taliban and the US got under way in Qutar.
- ❖ The latest negotiations between the two come as pressure builds for some sort of breakthrough in Afghanistan's gruelling conflict, with Washington jostling for a resolution.
- ❖ Pakistan issued an official order to freeze the assets of and impose a travel ban on JeM chief Masood Azhar after the UN declared him a "global terrorist". Pakistan − based Azhar is also banned from selling or purchasing arms and ammunition.
- ❖ In a huge diplomatic win for India, the United Nations designated Pakistan —based Jaish —e-Mohammed chief Masood Azhar as a "global terrorist" after China lifted its hold on a proposal to blacklist him.



❖ A new era dawned in Japan as Naruhito officially became emperor at midnight following his father's historic abdication from the Chrysanthemum Throne, the world's oldest monarchy.

- ❖ Julian Assange, the founder of WikiLeaks who took refuge in the Ecuadorian Embassy in London in 2012 to avoid being extradited to Sweden over sexual assault changes, was sentenced to 50 weeks in jail for flouting bail conditions by a court in London.
- ❖ Iraq, for the second year in a row, became India's top crude oil supplier, meeting more than a fifth of the country's oil needs in 2018-19 fiscal year.
- ❖ Public sector leader State Bank of India became the first Indian bank to link its saving and loan interest rates to the Reserve Bank of India (RBI)'s reportate.
- ❖ GST or Goods and Services Tax collections came in at a record high of Rs. 1, 13,865 crore in April, the government said.

# 3 May 2019

The Reserve Bank of India slapped monetary penality on five pre-paid payment instrument issuers including Vodafone m-pesa and Phonepe, for violating regulatory guidelines.

#### 4 May 2019

Researchers at the Indian Institute of Technology (IIT) Delhi successfully 3D bioprinted human skin models that have certain anatomically relevant structural, mechanical and biochemical features similar to native human skin.

# 7 May 2019

Business –to-business (B2B) technology start-ups have more than trebled in the last five years driven by the spurt in the need for digital transformation of enterprises, financial institutions, hospitals, government and small and medium enterprises, among others.

# • 8 May 2019

- ❖ Bank credit grew by 13.2% in financial year 2018 -19 as compared to 10.3% in the previous financial year, mainly aided by loans to services and retail sector.
- The United Nations Industrial Development Organisation (UNIDO) identified Mysuru as one of the pilot cities as part of a project titled 'Sustainable Cities' Integrated Approach'.
- Mysuru is the only city identified in the State while the four other cities selected in the country are Vijayawada, Guntur, Bhopal and Jaipur.

# 14 May 2019

- ❖ The two-day World Trade Organization ministerial meeting of developing countries concluded in New Delhi with the 22 participating countries reaching a common ground on immediately resolving the dispute settlement crisis.
- ❖ India is trying to rally the support of other developing countries in the World Trade Organisation to reform the "biased" system of assessing a country's services trade policies.