

**GOVERNANCE**

**NCERT Books in Indian Sign Language**

The Indian Sign Language Research and Training Centre (ISLRTC) and the National Council of Educational Research and Training (NCERT) signed a memorandum of understanding (MoU) to make NCERT textbooks accessible to hearing-impaired students in sign language.

**Key Points**

- About the MoU: NCERT textbooks, teachers' handbooks and other materials for Class I-XII of all subjects in Hindi and English medium would be converted into Indian Sign Language (ISL) in digital format.

**Significance:**

- It is a step towards fulfilling needs of Rights of Persons with Disabilities (RPWD) Act, 2016 and New Education Policy, 2020.
- Signing of this MoU is based on the United Nations Children's Fund - UNICEF's initiative "Accessible Digital Textbooks for All".
- So far, hearing impaired children used to study only through verbal or written medium now they can study through Indian Sign Language which is the same all over the country.
- In the childhood days, cognitive skills of children are developed and it is very necessary to provide them educational material as per their learning needs.
- It will not only enhance their vocabulary but also enhance their capabilities to understand concepts.

**Indian Sign Language (ISL):**

- Broadly, it's a set of hand and facial gestures used to communicate, most often by the hearing and speech impaired.
- It has its own grammar, syntax and regional "dialects", essentially different gestures for the same word or sentiment.
- The main difference from spoken languages lies in form: Sign languages are visual, spoken ones are auditory.
- Sign language is recognized as an official language in many countries across the world like the USA.
- Hearing Impairment in India

**Statistics:**

- According to the World Health Organization (WHO) in 2018, the prevalence of hearing impairment (HI) in India is around 6.3% (63 million people suffering from significant auditory loss).
- The estimated prevalence of adult-onset deafness in India is 7.6% and childhood-onset deafness is 2%.
- The larger percentage of Indian population also suffers from milder degrees of hearing loss and unilateral (one sided) hearing loss.
- Nearly 50% of deafness can be prevented if primary health-care approach is adopted for otological care (care of ear and its diseases) across the world.

**Initiative for Prevention:**

- National Program for Prevention and Control of Deafness (NPPCD): It was launched in 2006 in an effort to tackle the high incidence of deafness in the country, in view of the preventable nature of this disability.

**Funding Pattern:**

- 60:40 for all states except for the North Eastern and Himalayan States (90:10).
- In case of Union Territories, Central funding is 100% for all UTs except the UTs with legislature, where this ratio is 60:40.

**Objectives of the Program:**

- To prevent the avoidable hearing loss on account of disease or injury.
- Early identification, diagnosis and treatment of ear problems responsible for hearing loss and deafness.
- To medically rehabilitate persons of all age groups, suffering with deafness.
- To develop institutional capacity for ear care services by providing support for equipment and material and training personnel.

**Other initiatives:**

- Accessibility of news and educational videos with the incorporation of sign language/or written text subtitles and transcripts.

- Rights of Persons with Disabilities (RPWD) Act, 2016: Includes provisions for hearing impaired people.
- New Education Policy, 2020: Universalization of education (including disabled) from preschool to secondary level with 100% Gross Enrolment Ratio (GER) in school education by 2030.

#### **Indian Sign Language Research and Training Centre**

- ISLRTC is an autonomous national institute of Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment.
- It was established in 2015.
- It is dedicated to the task of developing man-power for popularizing the use of Indian Sign Language, teaching and conducting research in Indian Sign Language.

#### **NCERT:**

It is an autonomous organization under the Ministry of Education (MoE) which is responsible for:

- Ensuring qualitative improvement in school education by undertaking and promoting research in areas related to school education.
- Prepare and publish model textbooks, supplementary material.
- Develop and disseminate innovative educational techniques and practices.
- Act as a nodal agency for achieving the goals of Universalization of Elementary Education.

### **SCIENCE AND TECHNOLOGY**

#### **Nobel Prize for Physics 2020**

The Nobel Prize in Physics for the year 2020 was awarded to three astrophysicists **Roger Penrose** from the UK, **Reinhard Genzel** from Germany, and **Andrea Ghez** from the USA.

#### **Key Points**

- Roger Penrose received half of this year's prize for the discovery that a black hole formation is a robust prediction of the general theory of relativity.
- Black holes were one of the first and most extreme predictions of Einstein's General Theory of Relativity which came in 1915.
- The theory explains gravity, as objects try to follow a straight line through a universe whose geometry is warped by matter and energy. As a result, planets, as well as light beams, follow curving paths.
- Dr Penrose proved that if too much mass accumulated in too small a place, collapse into a black hole was inevitable. At the boundary of a black hole, called the event horizon, one would have to go faster than the speed of light to escape it, which is impossible. At the centre of a black hole, where the density became infinite, the laws of physics, would no longer apply.
- Genzel and Ghez received the second half of the prize for the discovery of a supermassive black hole at the centre of the Milkyway galaxy, now known to be the Sagittarius A\*.
- It has a mass four million times that of the Sun and is confined to an area roughly the size of our Solar System.
- In 2019, scientists got the first optical image of a black hole which is at the centre of the Messier 87 galaxy.
- Sagittarius A\* is the second black hole whose photographs have been captured by the Event Horizon Telescope project. It is yet to be released.
- Dr. Ghez is only the fourth woman to win the Nobel Prize in Physics, following Marie Curie in 1903, Maria Goeppert Mayer in 1963 and Donna Strickland in 2018.
- **Other News:** Americans Harvey J Alter and Charles M Rice, and British scientist Michael Houghton were awarded the Nobel Prize for Medicine or Physiology, 2020 for the discovery of the Hepatitis C Virus.

### **INDIAN ECONOMY**

#### **National Startup Award 2020**

The results of the first edition of National Startup Awards (2020) were recently released by the Ministry of Commerce & Industry.

The Startup India Showcase and Blockchain-based Certificate Verification System were also launched during the event.

#### **Key Points**

#### **About the Startup Awards:**

- **Designed by:** Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry.

- **Aim:** To recognize and reward outstanding Startups and ecosystem enablers that are building innovative products or solutions and scalable enterprises, with high potential of employment generation or wealth creation, demonstrating measurable social impact.
- **12 Sectors:** The Awards invited applications across 12 sectors, which are Agriculture, Education, Enterprise Technology, Energy, Finance, Food, Health, Industry 4.0, Space, Security, Tourism and Urban Services.
- Apart from these, startups were selected from those which create impact in rural areas, are women-led and founded in academic campuses (3 special categories).
- **Prize:** The winning startup founders will get a cash prize of Rs. 5 lakh and an opportunity to present their solutions to relevant public authorities and corporates. Incubators and accelerators will get Rs. 15 lakh as the winning amount.
- A total of 38 startups were awarded, one in each of the 35 categories and 3 special categories in the 12 sectors.

#### **Startup India Showcase:**

- It is part of the Startup India portal intended to be an online discovery platform for the most promising startups of the country.
- The Government of India has initiated the Startup India Scheme in 2016.
- The startups showcased here shall be handpicked by experts and will span across different sectors like FinTech, EdTech, Social Impact among others.
- The showcase will help industry, investors and public authorities find and connect with startups for potential partnerships, investments and public procurement respectively.

#### **Blockchain-based Certificate Verification System:**

- It will enable instant verification and access to certificates of recognitions issued by DPIIT.
- This feature introduces an added layer of security to the startup certificates.
- It can be accessed by Government Departments, procurement entities, investors, and other third parties to verify status of recognized startups for accessing different opportunities.

#### **Other Related News:**

- Recently, DPIIT also released the results of the 2nd edition of Ranking of States on Support to Startup Ecosystem in which Gujarat performed best among all States.
- DPIIT has also released the Ease of Doing Business Rankings of the States-2019 in which Andhra Pradesh topped.
- Recently, the Parliamentary Standing Committee on Finance tabled a report related to startups in Parliament.

#### **Way forward**

The awards will generate excitement and enthusiasm among the young entrepreneurs in taking their innovative ideas to the higher levels and propel the startups to expand and serve new geographies and large numbers of people.

This will help in generation of employment and achieving the goal of Atmanirbhat Bharat (Self Reliant India).

### **ENVIRONMENT AND DIVERSITY**

#### **Temporary Shelter for Migratory Birds: Sambhar Lake**

Recently, the Rajasthan government has decided to build temporary shelters for migratory birds near the Sambhar Lake (near Jaipur) before 2020's winter season.

#### **Key Points**

- Every year, a large number of birds from the cold northern regions of Central Asia come to Sambhar Lake.
- In 2019, more than 20,000 migratory birds died due to avian botulism in the lake.
- Rajasthan High Court took suo motu cognisance of the mass death and asked the expert committee to carry out an investigation and make recommendations.
- The Court has constituted a seven-member expert committee to study the impact of salt-forming and identify any illegal salt mining in the lake.
- It has suggested the state government seek the centre's support for more funds for creating an infrastructure for the safety and security of birds.

#### **Sambhar Lake**

- It is India's largest inland saline water body located near Jaipur in Rajasthan.
- It is surrounded on all sides by the Aravali hills.
- It is the source of most of Rajasthan's salt production.

- Sambhar has been designated as a Ramsar site (recognised wetland of international importance) because the wetland is a key wintering area for tens of thousands of flamingos and other migratory birds.

**Avian Botulism**

- It is a neuro-muscular illness caused by Botulinum (natural toxin) that is produced by bacteria, Clostridium botulinum.
- The bacteria is commonly found in the soil, rivers, and seawater. It affects both humans and animals.
- The bacteria also need anaerobic (absence of oxygen) conditions and do not grow in acidic conditions.
- The illness affects the nervous system of birds, leading to paralysis in their legs and wings.
- The outbreaks of avian botulism tend to occur when average temperatures are above 21 degrees celsius, and during droughts.

**INTERNATIONAL AFFAIRS****India's Stand on Nuclear Weapon**

In the recent High-level Meeting to Commemorate and Promote the International Day for the Total Elimination of Nuclear Weapons (26th September 2020), India reiterated that nuclear weapons should be abolished in a step-by-step non-discriminatory process.

**Key Points**

- India remains committed to the policy of No First Use (NFU) against nuclear weapon states and non-use against non-nuclear-weapon states.
- The recent stand indicates that India has not revised its key principles regarding the NFU principle.
- In 2019, the Defence Minister hinted at a possibility of changing the principle by declaring that 'circumstances' will determine the "No First Use" stance.
- India is a key partner in global efforts towards disarmament and strengthening the non-proliferation order.
- India believes that nuclear disarmament can be achieved through a step-by-step process underwritten by a universal commitment and an agreed multilateral framework after meaningful dialogues among all States possessing nuclear weapons, for building trust and confidence.
- The Conference on Disarmament (CD) remains the "world's single multilateral disarmament negotiating forum" and India supports holding of negotiations on a Comprehensive Nuclear Weapons Convention at the CD.
- India also remains committed to negotiations regarding a Fissile Material Cut-off Treaty (FMCT) in the CD.
- FMCT is a proposed international agreement that prohibits the production of two main components of nuclear weapons: highly-enriched Uranium and Plutonium.
- The consultations under the treaty laid down the most appropriate arrangement to negotiate a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

**Global Efforts:**

- The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and the New START Treaty (between the USA and the Russian Federation) are few of the most important global efforts towards nuclear disarmament.
- India has not signed NPT and CTBT.

**International Day for the Total Elimination of Nuclear Weapons**

- In 2013, the UN General Assembly (UNGA) declared 26th September to be the International Day for the Total Elimination of Nuclear Weapons (Nuclear Abolition Day).
- Objective: Total elimination of nuclear weapons through enhancing public awareness and education about the threat posed to humanity by nuclear weapons and the necessity for their total elimination.
- Achieving global nuclear disarmament is one of the oldest goals of the United Nations.
- The UNGA resolution establishing the day, also calls for progress on a nuclear weapons convention, a global treaty involving the nuclear-armed states in the prohibition and elimination of nuclear weapons under strict and effective international control.

**US Aircraft Re-fueling at A&N Island**

Recently, a USA Navy P-8A long range Maritime Patrol Aircraft (MPA) landed at Port Blair in the Andaman and Nicobar (A&N) Islands for refuelling under the bilateral logistics support agreement. This is the first time the USA got access to A&N under the Logistics Exchange Memorandum of Agreement (LEMOA).

**Key Points****LEMOA:**

- It allows both countries to have access to each other's designated military facilities for refueling and replenishment.
- Signed by India in 2016.
- Other foundational military communication agreements with the USA:

**General Security of Military Information Agreement:**

- GSOMIA allows militaries to share the intelligence gathered by them.
- Signed by India in 2002.
- An extension to the GSOMIA, the Industrial Security Annex (ISA), was signed at the 2+2 dialogue in 2019.
- ISA provides a framework for exchange and protection of classified military information between the USA and Indian defence industries.

**Communications and Information Security Memorandum of Agreement:**

- Valid for 10 years, COMCASA aims to provide a legal framework for the transfer of highly sensitive communication security equipment from the USA to India that will streamline and facilitate interoperability between their armed forces.
- Signed by India in 2018.

**BECA:** The USA is looking forward to India signing the Basic Exchange and Cooperation Agreement for Geo-Spatial cooperation (BECA), at the next India-USA 2+2 ministerial dialogue likely to be held in October, 2020.

- BECA will allow India to use the geospatial maps of the USA to get pinpoint military accuracy of automated hardware systems and weapons such as cruise and ballistic missiles.

**Strategic Significance of A&N Islands:**

- It is close to the Strait of Malacca and global sea lanes of communication.
- A&NI has become an important element of India's "Act East Policy" of engaging with countries in the region east of India.
- The Andaman and Nicobar chain of islands could be used as a basis for Indian maritime power projection into the Indo-Pacific and even beyond into the south-west Pacific.
- The A&NI could be used for India's Third Fleet (other two are the Western and Eastern Fleets) and the trans-shipment hub at Car Nicobar, could potentially be a strategic game-changer, rivalling the ports of Singapore or Colombo.
- Changing nature of warfare has led to the expansion of scope of a Tri-Command Service.
- As Andaman and Nicobar is the first Tri-Command structure in India, development of military infrastructure at A&NI is a key requirement in India's security strategy.

**Increased Maritime Interactions with Quad Countries:**

- Quadrilateral Security Dialogue (Quad) is the informal strategic dialogue between India, USA, Japan and Australia with a shared objective to ensure and support a "free, open and prosperous" Indo-Pacific region.
- There has been a sharp increase in India's maritime interactions with the Quad countries on a bilateral basis centred around information sharing for improved Maritime Domain Awareness (MDA) in the Indian Ocean Region and Indo-Pacific.
- MDA is defined by the International Maritime Organization as the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of a country.
- India has logistics agreements with all three Quad countries — Australia, Japan and the USA. India has also signed maritime information sharing agreements with Australia and Japan and a similar agreement is in the works with the USA.

**Way Forward**

The increase in India's maritime interactions with the Quad countries will strengthen India's position in the Indian Ocean Region and Indo-Pacific.

Strategic balancing is the key to move forward in relationships with powerful countries like the USA.

India and the USA must now strive to complete the unfinished agreements and set the course for a Comprehensive Strategic Global Partnership.

**IMPORTANT FACTS FOR PRELIM**

**Indian Air Force Day**

The Indian Air Force (IAF) is celebrating 88th Air Force Day on 8th October.

**Key Points**

- 8th October: On this day, the Air Force in India was officially raised in 1932 as the supporting force of the Royal Air Force of the United Kingdom.

**History:**

- 1933: First operational squadron.
- 1940s: After participation in World War II (1939-45), the Air Force in India came to be called the Royal Indian Air Force.
- 1950: It became the Indian Air Force after the republic came into being.

**Facts:**

- India Air Force is the fourth largest in the world after the USA, China and Russia.
- Headquarters: New Delhi
- Motto of the IAF is 'Touch the Sky with Glory' and it was taken from the eleventh chapter of the Bhagavad Gita.
- The President of India holds the rank of Supreme Commander of the air force.
- The Chief of Air Staff, an air chief marshal is responsible for the operational command of the air force.

**Operations:**

- After independence, IAF took part in wars with Pakistan and the People's Republic of China.
- Operation Meghdoot: It was on 13th April in 1984 when the Indian Army along with the Indian Air Force and paramilitary forces launched the 'Operation Meghdoot' to secure the control of the heights predominating the Siachen glacier.
- IAF took part in relief operations during natural calamities such as Gujarat cyclone in 1998, the tsunami in 2004, etc.
- IAF works with the United Nations' peacekeeping missions.

**Celebrations:**

- The day is being marked by the main event comprising a parade and flypast at Hindon Air Force Base (Ghaziabad) along with events at IAF establishments across the country.
- This year, the Tejas LCA, Mig-29 and 21 and Sukhoi-30 along with newly inducted Rafale jets will be on show.
- It will also have helicopters like Chinook, Apache, etc.

**DAILY ANSWER WRITING PRACTICE**

**Qns. Indian nationalism grew partly as a result of colonial policies and partly as a reaction to colonial policies. Discuss. (250 words)**

**Ans.**

Indian Nationalist Movement was a grand and prolonged struggle launched against British imperialism. Nationalism was the main ideology and the instrument with whose help this struggle was launched.

- In the context of the Indian Nationalist Movement, Indian nationalism represented two major ideas: anti-imperialism and national unity. In other words, any person, movement or organisation that practised and upheld these two ideas, could be considered a nationalist.

**Factors that led to rise of Indian Nationalism:**

**Colonial Policies:**

- **Western education:** When the British introduced Western education in India, they aimed at creating a class of educated Indians who could serve the British Interests. However, the English language helped nationalist leaders from different linguistic regions to communicate with each other and create a sense of national identity.
- Modern western education also propagated the ideas of Nationalism, democracy, rights and freedom.
- **Socio- religious reforms:** These reform movements sought to remove social evils which divided the Indian society; this had the effect of bringing different sections together, and proved to be an important factor in the growth of Indian nationalism .

- **Modern press:** the second half of the nineteenth century saw the rise of modern press in India. It helped in often criticising the British policies and bringing together people from different backgrounds by spreading awareness.
- **Political unity:** The political unification of the country, necessitated by the convenience had a two fold effect:
  - The economic fate of the people of different regions got linked together; for instance, failure of crops in one region affected the prices and supply in another region.
  - Modern means of transport and communication (esp Railways) brought people, especially the leaders, from different regions together. This was important for the exchange of political ideas and for mobilisation and organisation of public opinion on political and economic issues.

**Reaction to colonial policies:**

- **Rediscovery of India's past:** The historical researches by European and Indian scholars created an entirely new picture of India's past.
- The theory put forward by European scholars, that the Indo-Aryans belonged to the same ethnic group from which other nations of Europe had evolved, gave a psychological boost to the educated Indians.
- The self-respect and confidence so gained helped the nationalists to demolish colonial myths that India had a long history of servility to foreign rulers.
- **Rise of middle class intelligentsia:** British administrative and economic innovations gave rise to a new urban middle class in towns. This class, prominent because of its education, new position and its close ties with the ruling class, came to the forefront. The leadership to the Indian National Congress in all its stages of growth was provided by this class.
- **Racial arrogance of rulers:** Racial myths of white superiority were sought to be perpetuated by the British through a deliberate policy of discrimination and segregation. Indians felt deeply hurt by this.
- **Example:** Lytton's reactionary policies such as reduction of maximum age limit for the I.C.S. examination from 21 years to 19 years (1876)
- It became clear to the nationalists that justice and fair play could not be expected where interests of the European Community were involved. However, the organised agitation by the Europeans to revoke the Ilbert Bill also taught the nationalists how to agitate for certain rights and demands.

**Conclusion**

- The British policies and the growing anger against the colonial government brought together different groups and classes of Indians into a common struggle for freedom.
- In a nutshell, we can say that Indian nationalism grew partly as a result of colonial policies and partly as a reaction to colonial policies.

**DAILY QUIZ**

1. Which of the following statements is/are correct?
  1. The Nobel Prize for Physiology in 2020 has been awarded for the discovery of the Hepatitis C Virus.
  2. The National Viral Hepatitis Control Programme (NVHCP) was launched to eliminate Hepatitis C by 2030 in India.
  3. Hepatitis C vaccine is included under India's Universal Immunization Programme (UIP).

Choose the correct answer using the code given below:

  - a) **1 and 2 only**
  - b) 2 and 3 only
  - c) 1 and 3 only
  - d) 1, 2 and 3
2. With reference to the Coalition of Epidemic Preparedness for Innovation (CEPI), consider the following statements:
  1. CEPI was launched in 2020 in response to Covid-19 in order to develop vaccines to stop future epidemics.
  2. It is an initiative of the World Health Organisation.

Which of the statements given above is/are correct

  - a) 1 only
  - b) 2 only
  - c) Both 1 and 2
  - d) **Neither 1 nor 2**

3. With reference to the World Habitat Day, consider the following statements:
1. The World Habitat Day 2020 is hosted by the Habitat International Coalition and the Government of Indonesia.
  2. First World Habitat Day was celebrated in 1986 in Kenya.
- Which of the statements given above is/are correct?
- a) 1 only
  - b) 2 only**
  - c) Both 1 and 2
  - d) Neither 1 nor 2
4. With reference to the Lokpal and Lokayukta Act, 2013, consider the following statements:
1. The jurisdiction of Lokpal does not include the Prime Minister.
  2. The term of office fixed for Lokayukta is of 5 years duration or 65 years of age, whichever is earlier.
- Which of the statements given above is/are correct?
- a) 1 only
  - b) 2 only
  - c) Both 1 and 2
  - d) Neither 1 nor 2**
5. Frequently in the news, Panglong Peace Conference is related to?
- a) Afghanistan
  - b) Myanmar**
  - c) Democratic People's Republic of Korea
  - d) Hong Kong



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