

GOVERNANCE

Pakistan's Provincial Status to Gilgit-Baltistan

India has strongly rejected Pakistan's move to grant provisional provincial status to Gilgit - Baltistan.

- Gilgit-Baltistan is one of the disputed territories of India.



Key Points

Gilgit-Baltistan:

- It is a chunk of high-altitude territory located on the north western corner of the Union Territory of Ladakh.
- It is located strategically as it borders Pakistan, Afghanistan and China.
- The region was a part of the erstwhile princely state of Jammu and Kashmir, but has been under Pakistan's control since 4th November, 1947, following the invasion of Kashmir by tribal militias and the Pakistan army.
- Maharaja Hari Singh, the last Dogra ruler of J&K, had signed the Instrument of Accession with India on 26th October 1947.
- India moved to the United Nations Security Council to raise the issue of Pakistan's invasion on 1st January 1948.
- The UN Security Council passed a resolution calling for Pakistan to withdraw from all of Jammu and Kashmir and then India had to reduce its forces to the minimum level following which a plebiscite would be held to ascertain people's wishes.
- However, no withdrawal was ever carried out and it remains a point of contention between two countries.

Background:

- Recently, Saudi Arabia, a key ally of Pakistan, had removed Pakistan-occupied-Kashmir and Gilgit-Baltistan from the Pakistan map on its new banknote after India asked it to take "urgent corrective steps" about the "gross misrepresentation".
- On the first anniversary of the revocation of Jammu and Kashmir's special status, the Pakistan government had released a new "political map" which included Jammu and Kashmir, Ladakh and parts of western Gujarat as part of its territory.
- Describing it as "political absurdity" and a "ridiculous assertion", India said it "confirms the reality of Pakistan's obsession with territorial aggrandisement supported by cross-border terrorism".
- The Gilgit-Baltistan region is at the centre of USD 65 billion China Pakistan Economic Corridor Infrastructure development plan.

India's Stand:

- India claims that the entire Jammu and Kashmir and Ladakh including Gilgit-Baltistan is an integral part of India by the virtue of legal, complete and irrevocable accession of Jammu and Kashmir to the union of India in 1947.

- Pakistan's move to name Gilgit-Baltistan as its fifth province is meant to "camouflage its illegal occupation" of the area but it cannot "hide the grave human rights violations, exploitation and denial of freedom" to the people for over seven decades.

INDIAN GEOGRAPHY

Tectonically Active Zone of Himalayas

Recently, a group of scientists from the Wadia Institute of Himalayan Geology (WIHG), Dehradun have found that the Indus-Tsangpo Suture Zone (ITSZ) of Himalayas is tectonically active.

- The suture zone of Himalaya was conventionally thought to be locked.
- WIHG is an autonomous institute under the Department of Science and Technology (DST), Government of India.
- Tectonics is the scientific study of the deformation of the rocks that make up the Earth's crust and the forces that produce such deformation.
- It deals with the folding and faulting associated with mountain building, the large-scale, gradual upward and downward movements of the crust and sudden horizontal displacements along faults.

Key Points

Geological Features that Support the Finding:

- Sedimentary beds are tilted and thrust broken.
- Rivers are associated with uplifted terraces.
- Bedrock shows brittle deformation at much shallower depths.

These deformed geological features were dated using the technique of Optically Stimulated Luminescence (OSL) and data of seismicity and denudation rate was also reviewed.

Optically-Stimulated Luminescence: It is a late quaternary (geological time period that encompasses the most recent 2.6 million years) dating technique used to date the last time quartz sediment was exposed to light. As sediment is transported by wind, water or ice, it is exposed to sunlight and zeroed of any previous luminescence signal.

Seismicity: It is the worldwide or local distribution of earthquakes in space, time, and magnitude. More specifically, it refers to the measure of the frequency of earthquakes in a region.

Denudation: It is a long term process in which the wearing and tearing of the surface of the Earth take place. It includes all those processes that lower relief and acts both chemically (chemical weathering) and physically (mechanical weathering).

The region of the ITSZ has been neo-tectonically active since the last 78000-58000 years.

- The ITSZ is a suture zone in the Ladakh region and marks the limit of the Indian plate where it collides with the Eurasian plate and is subducted below the latter.
- The ITSZ can be traced for more than 200 km and a wide variety of rock association along the ITSZ indicates that the collision at the plate boundary was of very complex nature.
- The ITSZ was conventionally believed to be a locked zone till now.

This will have major implications in terms of earthquake study, prediction, understanding the seismic structure of the mountain chains well as its evolution.

Suture Zones

- A suture zone is a linear belt of intense deformation, where distinct terranes, or tectonic units with different plate tectonic, metamorphic, and paleogeographic histories join together.
- These zones also provide the only record of deep oceanic crust and of ancient seafloor processes for roughly the first 90% of Earth's history.
- Their study provides a means to understand the end-product of plate tectonic processes in time and space. In plate tectonics, sutures are seen as the remains of subduction zones together with the terranes possibly representing fragments of different tectonic plates.
- The suture zone is often represented on the surface by a mountain range comprising intensely deformed rocks.
- The Iapetus Suture from Great Britain, which is now concealed beneath younger rocks, and Indo-Tsangpo Suture well exposed in the Himalayas are some of the best examples of suture zones.

INTERNATIONAL AFFAIRS

India-USA 2+2 Dialogue 2020

Recently, India and the USA have concluded the 3rd India-USA 2+2 dialogue in New Delhi.

- The USA reiterated its support to India in defending its territorial sovereignty in the background of the ongoing standoff between India-China.

- It also referred to the greater threats posed by China in the Indo-Pacific region and by the Covid-19 pandemic in general.
- The first two rounds of these dialogues between both the countries were held in 2018 and 2019.

Key Points

- India has signed the Basic Exchange and Cooperation Agreement (BECA) with the USA.
- BECA will enable the exchange of geospatial data and information between the two countries and will improve the accuracy of India's missiles in precision strikes.
- The geospatial maps and charts to be shared, will be acquired from multiple sources like satellites, unmanned aerial vehicles (UAVs), reconnaissance aircraft, aerostats among others.
- As part of measures to enhance military to military cooperation, Liaison Officers at each other's establishments could be leveraged to enhance information sharing.
- BECA is one of the four foundational military communication agreements between the two countries. The other three are:
 - General Security Of Military Information Agreement.
 - Logistics Exchange Memorandum of Agreement.
 - Communications and Information Security Memorandum of Agreement.
- Both countries released a Joint Statement on shared Indo-USA goals in the Asia-Pacific region and emphasised that the Code of Conduct in the South China Sea should not prejudice the legitimate rights and interests of any nation in accordance with international law.
- They also decided to expand joint capacity building activities with partner countries in the Indo-Pacific region.

Other Steps Taken:

- Memorandum of Understanding (MoU) on Technical Cooperation in Earth Observations and Earth Sciences.
- Agreement to extend the duration of the MoU on the Global Center for Nuclear Energy Partnership.
- Agreement on the electronic exchange of customs data.
- Letter of intent regarding cooperation in traditional Indian medicines.
- Discussions on the status of Afghanistan and support for its peace process.

'2+2' Dialogue

- 2+2 Ministerial is the highest-level institutional mechanism between the two countries.
- It is a format of dialogue where the defence/foreign ministers or secretaries meet with their counterparts from another country.
- India holds such talks with Australia, Japan and the USA.

Way Forward

- The signing of BECA is a significant achievement for India as it is a sign of the USA accepting the Indian request for cooperation in the advanced field of maritime domain awareness.
- India-USA's national security convergences have grown closer in a more multipolar world and the meetings as well as the agreements not only advance their individual interests but also ensure that the bilateral cooperation between them makes a positive contribution in the world arena.

SCIENCE AND TECHNOLOGY**Computation Analysis of Indian Genes**

Recently, the results from the computation analysis of the 1029 sequenced genomes from India were published in the scientific journal, Nucleic Acid Research.

Key Points

- The analysis has found that out of 55,898,122 single nucleotide variants in India 18,016,257 (32.23%) variants are unique and found only in the samples sequenced from India.
- This emphasizes the need for an India centric population genomic initiative.
- The analysis was carried out by CSIR constituent labs, Institute of Genomics and Integrative Biology (IGIB), Delhi and Centre for Cellular and Molecular Biology (CCMB), Hyderabad.

IndiGenomes Resource Database

- It encompasses the genomic data from over 1000 whole genome sequences sequenced from across India as part of the IndiGen programme and represents diverse geographies and ethnicities.
- The IndiGen Programme was launched in April 2019, under which genome sequencing of 1029 self-declared healthy Indians drawn from across the country has been completed.
- Its objective was to enable genetic epidemiology and develop public health technologies applications using population genome data.

- The resource provides access to over 55 million genetic variants representing the contemporary Indian population with an objective to classify variants involved in mendelian disorders and improve precision medicine outcomes.
- Mendelian disorder is a type of genetic disorder, resulting due to alterations in a gene or due to abnormalities in the genome.
- It enables the identification of markers for carrier screening, variations causing genetic diseases, prevention of adverse events and provides better diagnosis and optimal therapy through mining data.
- This resource can provide useful insights for clinicians and researchers in comprehending genetics not only at the population level but at the individual level.

Background

- Despite having this rich genetic diversity, India has been under-represented in global genome studies. Further, the population architecture of India has resulted in high prevalence of recessive alleles.
- In the absence of large-scale whole genome studies from India, the population-specific genetic variants are not adequately captured and catalogued in global medical literature.
- In order to fill the gap of whole genome sequences from different populations in India, CSIR initiated the IndiGen Programme.

Genome

- A genome is all the genetic matter in an organism. It is defined as an organism's complete set of Deoxyribose Nucleic Acid (DNA), including all of its genes.
- Every organism's genetic code is contained in its DNA, the building blocks of life.
- Each genome contains all of the information needed to build and maintain that organism.
- In humans, a copy of the entire genome contains more than 3 billion DNA base pairs.

Genome sequencing

- Genome sequencing is figuring out the order of DNA nucleotides, or bases, in a genome—the order of Adenine, Cytosine, Guanine, and Thymine that make up an organism's DNA.

Application:

- Genome sequencing can play a crucial role for new advancements in medical science (like predictive diagnosis and precision medicine, genomic information) and in disease management.
- Through genome sequencing methodology, researchers and clinicians can easily detect the disease related to genetic disorder.

Importance of Genome Sequencing:

- The study of entire genome sequences will help understand how the genome as a whole works—how genes work together to direct the growth, development and maintenance of an entire organism.
- The genes account for less than 25% of the DNA in the genome, and so knowing the entire genome sequence will help scientists study the parts of the genome outside the genes.

IMPORTANT FACTS FOR PRELIM

Electronic Exchange of Customs Data

Recently, the Department of Posts, Government of India (India Post) and United States Postal Service signed an agreement for electronic exchange of customs data related to postal shipments between the two countries.

Key Points

- **Objective:** The primary objective of this agreement is to facilitate 'ease of exports' for small and large exporters through postal channels from different parts of the country.
- **Features:** The agreement will make it possible to transmit and receive electronic data of international postal items prior to their physical arrival at the destination and would enable customs clearance of postal items in advance in line with the evolving global postal framework.
- Exchange of Electronic Advance Data (EAD) will be a key driver towards promoting mutual trade with emphasis on the exports.
- USA is the top export destination for India (~17%) which is also reflected in exchange of goods through postal channels.
- In 2019, around 20% of international Express Mail Service (EMS) and 30% of Letters & Small Packets transmitted by India Post were destined to the USA whereas 60% of the Parcels received by India Post were originated from the USA.

Benefit: This will fulfill a major demand of the export industry to expedite customs clearances of export items and will contribute towards making India an Export Hub for the world.

The agreement will also improve the performance of postal services in terms of reliability, visibility and security.

India Post

- India Post is the trade name for the Department of Posts (DoP), a government-operated postal system in India under the Ministry of Communications.
- With 1, 55,531 Post Offices, the DoP has the most widely distributed postal network in the world.

Functions:

- Delivering mails, accepting deposits under Small Savings Schemes, providing life insurance cover under Postal Life Insurance (PLI) and Rural Postal Life Insurance (RPLI) and providing retail services like bill collection, sale of forms, etc.
- It also acts as an agent for the Government of India in discharging other services for citizens such as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) wage disbursement and old age pension payments.

DAILY ANSWER WRITING PRACTICE

Qns. “An independent judiciary enjoying public confidence is a basic necessity of the rule of law.” In light of the statement, discuss the need of Code of Conduct to be followed by the judges. (150 words)

Ans.

An independent judiciary enjoying public confidence is a basic necessity of the rule of law.

For the judiciary to be independent and impartial to serve the constitutional goals, the Judges need to act fairly, reasonably, free of any fear and favor. The judiciary stands between the citizen and the State as a rampart against misuse or abuse of power by the executive. Therefore, it is absolutely essential for the judiciary to be free from executive pressure and the judges follow ethical conduct.

Need for Code of Conduct for judges

- For the Judicial decision to be honest and to uphold the Integrity and Independence of the Judiciary.
- In order to make a judicial decision fair, without any objective and without any bias, a Judge should follow code of ethics such as justice, equality, objectivity etc.
- For judges to avoid conflicts of interest in the performance of official duties.
- In order to have transparency and accountability in the administration of justice.
- To encourage judges to remain aloof from political favours in administration of justice.
- Integrity is moral uprightness; honesty. It takes in its sweep, probity, innocence, trustfulness, openness, sincerity, blamelessness, immaculacy, rectitude, uprightness, virtuousness, righteousness, goodness, cleanness, decency, honour, reputation, nobility, irreproachability, purity, respectability, genuineness, moral excellence etc.
- In short it depicts sterling character with firm adherence to a code of moral values. ‘Judiciary is an integrity institution’. Therefore, Judicial Officers including judges should possess the sterling quality of integrity.

Judges must follow in order to maintain justice

- The Supreme Court of India in its Full Court Meeting held on May 7, 1997 unanimously adopted a charter called the ‘Restatement of Values of Judicial Life’, generally known as the Code of Conduct for judges.
- A Judge should practice a degree of aloofness consistent with the dignity of his office.
- A Judge shall not hear and decide a matter in which a member of his family, a close relation or a friend is concerned.
- A Judge shall not enter into public debate or express his views in public on political matters or on matters that are pending or are likely to arise for judicial determination.
- A Judge is expected to let his judgments speak for themselves. He shall not give interviews to the media.
- A Judge shall not accept gifts or hospitality except from his family, close relations and friends.
- A Judge shall not hear and decide a matter in which a company in which he holds shares is concerned unless he has disclosed his interest and no objection to his hearing and deciding the matter is raised.
- A Judge shall not speculate in shares, stocks or the like.

Conclusion

There is nothing wrong in a Judge having an ambition to achieve something, but if the ambition to achieve is likely to cause a compromise with his divine judicial duty, better not to pursue it.

Every judge must at all times be conscious that he is under the public gaze and there should be no act or omission by him which is unbecoming of the high office he occupies and the public esteem in which that office is held.

DAILY QUIZ

1. Consider the following statements regarding 'Child Care Leave':

1. It is an earned leave granted to the married women employees only.
2. Women employees having minor children may be granted child care leave for a maximum period of two years during their entire service.
3. Single male parents working in private sectors can also avail the benefits of child care leave.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 3 only**
- c) 2 and 3 only
- d) 1, 2 and 3

2. Consider the following statements:

1. A superconductor is a substance that conducts electricity without resistance.
2. A superconducting material does not exhibit perfect diamagnetism.

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 Basic Exchange and Cooperation Agreement (BECA), consider the following statements:

1. It will help improve the accuracy of India's missiles in precision strikes.
2. BECA is an important precursor to India acquiring armed unmanned aerial vehicles

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 Electronic Exchange of Customs Data, consider the following statements

1. It is signed between India and UAE.
2. It would also allow custom duty free trade between the two countries.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2**

5. With reference to Maritime India Vision 2030, consider the following statements:

1. It is an annual blueprint for the maritime sector.
2. A pan-India port authority will be set up under the new Indian Ports Act.

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