

GS PAPER 1- GEOGRAPHY- CHANGES IN CRITICAL GEOGRAPHICAL FEATURES (INCLUDING WATER-BODIES AND ICE-CAPS)**Increasing frequency of landslides in the Sedongpu Gully of the Tibetan Plateau**

The article discusses the increasing frequency of landslides in the Sedongpu Gully of the Tibetan Plateau, linked to warming temperatures and earthquakes. These events could cause severe flooding and sediment issues in India's northeast, particularly affecting the Brahmaputra River.

What is Happening in the Sedongpu Gully?

1. The Sedongpu Gully is in the Tibetan Plateau, near the border with Arunachal Pradesh, India. It is 11 km long and drains into the Tsangpo River, which becomes the Siang River in India. The Tsangpo creates one of the world's deepest gorges, called the Great Bend.
2. Since 2017, more than 700 million cubic meters of debris have been mobilized in the Sedongpu Gully. This area has seen a rapid increase in mass-wasting events, including landslides.
3. The main causes are warming temperatures and earthquakes, with 13 major events happening after 2017.
4. Before 2012, temperatures in the area rarely exceeded 0° C. From 1981 to 2018, annual temperatures increased by 0.34° to 0.36° C, higher than the global average. This warming is contributing to more landslides and instability in the region.

What are the potential impacts on India and Bangladesh?

1. The sediment from these landslides could cause significant problems downstream in India and Bangladesh.
2. The Brahmaputra River, one of the world's most sediment-laden rivers, could carry even more sediment, leading to more severe flooding, riverbank erosion, and navigation issues.
3. The 2000 flash floods in Arunachal Pradesh and Assam, caused by a similar landslide in Tibet, are a worrying example.

Why is there concern over dams in the region?

1. China plans to build a massive 60-gigawatt hydropower project on the Tsangpo River.
2. This project could increase the risk of river choking and flash floods, especially in a geologically unstable area.
3. India's planned dams on the Siang could also face similar risks, potentially affecting millions of people downstream.

What Should be Done?

1. **Monitor Geophysical Events:** Regularly observe landslides, rockfalls, and other erosional activities in the Sedongpu Gully and surrounding areas to anticipate future risks.
2. **Focus on Sediment Management:** Address the increasing sediment load in the Brahmaputra River, which carries more than 800 tonnes at Guwahati, to prevent severe flooding and erosion.
3. **Evaluate Impact of Dams:** Reassess plans for large dams like China's 60-gigawatt project on the Tsangpo and India's Siang projects, considering the region's geophysical instability and past events like the 2000 Arunachal floods.

GS PAPER 2- GOVERNANCE-MECHANISMS, LAWS, INSTITUTIONS AND BODIES CONSTITUTED FOR THE PROTECTION AND BETTERMENT OF THESE VULNERABLE SECTIONS**J.S. Verma Committee recommendations and the government's decision on it**

The article discusses the Justice J.S. Verma Committee's recommendations on sexual assault laws. It also includes its opposition to the death penalty for rape, the government's decision to introduce death penalty in certain rape cases, and the committee's stance on gender rights and marital rape.

What did the Justice J.S. Verma Committee recommend?

1. **Enhanced Sentences for Rape:** The committee recommended increasing the punishment for rape to a minimum of 10 years, which could extend up to 20 years or life imprisonment, but explicitly advised against the death penalty.
2. **Against the Death Penalty:** It argued that the death penalty does not serve as an effective deterrent against crimes, supporting this view with data that showed a consistent decline in murder rates in India over the last 20 years, despite fewer executions since 1980.
3. **Marital Rape:** The committee advised removing the marital exemption for rape, asserting that marriage should not be considered a defense against the charges of rape.

4. **Gender Rights and Empowerment:** The committee emphasized the need for true empowerment of women, which goes beyond political equality to include social, educational, and economic equality. It noted that changing social mindsets and overcoming gender biases require systemic changes in education and societal behavior, supported by leadership in society.

What was the Union Cabinet's decision?

1. **Death Penalty Introduction:** Contrary to the committee's advice, the Cabinet introduced the death penalty for severe rape cases. For example, under Section 376A of the Indian Penal Code, the death penalty is applied for rape leading to the victim's death or a persistent vegetative state.
2. **Further Amendments in 2018:** The laws were expanded to include the death penalty for gang rape of a girl under 12 years old (Section 376DB) and life-long imprisonment if the victim is under 16 (Section 376DA).
3. **Marital Rape Exemption:** The Cabinet did not criminalize marital rape, maintaining the exemption for husbands if the wife is over 18 years old under the new Bharatiya Nyaya Sanhita.

GS PAPER 2- GOVERNANCE- MECHANISMS, LAWS, INSTITUTIONS AND BODIES CONSTITUTED FOR THE PROTECTION AND BETTERMENT OF THESE VULNERABLE SECTIONS

Challenges Faced By Persons With Disabilities (Pwds) In India

The article discusses the challenges faced by persons with disabilities (PwDs) in India, including social stigma, lack of educational and job opportunities, and poor infrastructure. It highlights the need for better inclusion policies in both education and employment to ensure dignity and equality for PwDs.

What challenges do persons with disabilities (PwDs) face in India?

1. **Social Stigma and Marginalization:** PwDs are often seen as objects of pity, helplessness, or ridicule, which erodes their identity and dignity. This negative portrayal contributes to societal attitudes that exclude and discriminate against PwDs.
2. **Educational Challenges:** Less than 1% of India's educational institutions are disabled-friendly. Only 40% of school buildings have ramps, and approximately 17% have accessible restrooms.
3. **Employment Barriers:** In 2023, only 5 out of 50 Nifty 50 companies had more than 1% PwDs on their rolls, mostly in public sector companies. Despite legislative mandates, the implementation of inclusive policies is lacking.
4. The Rights of Persons with Disabilities Act, 2016, offers reservations in government jobs and incentives in private jobs, but **implementation is weak.**
5. **Lack of Dignity and Representation:** PwDs are often portrayed negatively, leading to a lack of dignity and identity. Instances of mockery, such as in a viral video by former cricketers, highlight ongoing societal challenges.

How do other countries and institutions support PwDs?

1. **Stanford University, USA:** Stanford provides robust support structures, including housing assistance and devices for PwDs. It also has a comprehensive resource center dedicated to supporting students with disabilities.
2. **Brazil:** Companies with over 100 employees must ensure that 2%-5% of their workforce consists of PwDs. Non-compliance results in fines based on the company size and repeated offenses.
3. **Japan:** Japan offers subsidies to employers who hire PwDs, encouraging their inclusion in the workforce.

What Can Be Done to Improve the Situation?

1. Shiv Nadar University in India provides a good model by offering personalized support to PwD students based on individual needs and conditions. However, such measures are not widespread.
2. The University Grants Commission has proposed guidelines for accessibility in higher education, but the actual presence of PwDs in educational settings remains low.
3. Encouraging respectful representation can help reduce societal stigma and improve dignity for PwDs.

GS PAPER2- GOVERNANCE-ISSUES RELATING TO DEVELOPMENT AND MANAGEMENT OF SOCIAL SECTOR/SERVICES RELATING TO HEALTH

New-age gateway devices are causing a public health crisis

The article discusses how devices like e-cigarettes and vapes, once marketed as safer alternatives to smoking, are now causing a public health crisis. They are particularly harmful to children, leading to addiction, physical harm, and mental health issues.

What are the new-age gateway devices?

1. New-age gateway devices like e-cigarettes, vaping pens, and heated tobacco products (HTPs) were marketed as healthier alternatives to smoking.
2. However, they have instead caused a public health crisis. These devices are harming both the physical and mental health of children, making the problem worse.

What are the Impacts of such devices?

1. **Increased Youth Addiction:** A survey published by JAMA Network Open in November 2022 found that adolescent e-cigarette users are highly addicted, often using their first tobacco product within five minutes of waking. E-cigarettes deliver nicotine more efficiently than traditional cigarettes, increasing addiction.
2. **Targeted Marketing:** Manufacturers target children with flavors like strawberry and cotton candy. These flavors, combined with appealing ads, make vaping attractive to young users. Children, especially those aged 10 to 20, are vulnerable due to peer pressure and the desire to fit in.
3. **Psychological Harm:** Vaping is linked to loneliness, depression, anxiety, and suicidal behaviors among adolescents. The Australian Institute of Family Studies reports that these devices contribute to significant mental health challenges in young users.
4. **Physical Health Risks:** Users face physical health risks, including lung damage and conditions like EVALI. The use of benzoic acid in newer e-cigarettes enhances nicotine delivery, increasing addiction and potential health consequences.

Gateway to Harder Substances: Vaping is often mistakenly perceived as harmless. However, it can lead to experimenting with more dangerous substances like cannabis, cocaine, and heroin, raising long-term substance abuse concerns.

PRELIM FACTS

1. India Donates BHISHM Cubes to Ukraine for Emergency Medical Care

India will provide humanitarian assistance to Ukraine by donating four Bharat Health Initiative for Sahyog Hita & Maitri (BHISHM) Cubes.

What are BHISHM Cubes?

1. The BHISHM Cube is a portable medical hospital developed as part of the Bharat Health Initiative for Sahyog, Hita, and Maitri (Project BHISHM).
2. It is specifically designed to offer rapid and comprehensive medical assistance in emergency situations, such as disaster-hit regions.

Key Features of the BHISHM Cube

1. **Advanced Medical Facilities:** The cube is equipped with essential medical equipment, including an operating theater, X-ray machines, blood testing equipment, and ventilators. This enables it to handle a wide range of medical emergencies effectively.
2. **High Capacity and Quick Deployment:** It is capable of treating up to 200 casualties. The BHISHM Cube can be fully operational in just 12 minutes, providing swift medical support.
3. **AI and Data-Driven Management:** The cube utilizes artificial intelligence (AI) and data analysis to efficiently coordinate, monitor, and manage medical services, enhancing the quality and speed of care provided.
4. **Durability and Portability:** It is designed to be robust, waterproof, and lightweight. The BHISHM Cube can withstand harsh environments, making it ideal for deployment in various challenging conditions.
5. **User-Friendly Technology:** The cube comes with a dedicated app that provides medical professionals with real-time information on available supplies and equipment. The app also includes instructional videos to assist with setup and operation, ensuring smooth and effective use in the field.

2. Unified Pension Scheme (UPS)

The Union Cabinet introduced the Unified Pension Scheme (UPS) which will be effective from April 1, 2025. This new scheme combines the best elements of the Old Pension Scheme (OPS) and the National Pension Scheme (NPS).

About Unified Pension Scheme (UPS)

1. The Unified Pension Scheme (UPS) has been launched to provide government employees with a steady pension based on their length of service and the most recent basic salary drawn.
2. Aim: It aims to provide a balanced approach to pension management for government employees, combining the stability of the OPS (Old Pension Scheme) with the fiscal responsibility of the NPS (New Pension Scheme).

3. Who can opt for UPS: The UPS is available to all government employees who have retired under the NPS since 2004. They can choose to switch to the UPS and receive arrears adjusted for any amounts already withdrawn under the NPS.

4. Employees have the option to remain with the NPS, but this decision is final once made.

5. Implementation: It is scheduled for implementation from April 1, 2025.

Features of the Unified Pension Scheme

FeaturesDescription

Assured Pension : Minimum Qualifying Service: Employees with a minimum of 25 years of service are eligible for a pension amounting to 50% of the average basic salary drawn during the last 12 months before retirement.

Shorter Service Periods:For those with less than 25 years but at least 10 years of service, the pension amount will be adjusted according to the length of service.

Assured Minimum Pension : A minimum pension of Rs 10,000 per month will be provided to employees with at least 10 years of service upon retirement.

Family Pension : The family of a deceased government employee will receive 60% of the employee's pension at the time of their demise.

Inflation Indexation : The pension, family pension, and minimum pension amounts will be adjusted for inflation based on the All India Consumer Price Index for Industrial Workers (AICPI-IW).

Lump Sum Payment at Superannuation :Upon retirement, employees will receive a lump sum payment equal to 10% of their salary and Dearness Allowance (DA) for every six months of completed service.

This payment is in addition to gratuity and does not reduce the amount of the secured pension.

3.Tanager-1

Recently, Tanager-1 satellite was **launched from California, USA.**

About Tanager-1 Satellite:

- **Purpose:** To track **methane and carbon dioxide** emissions.
- **Imaging Spectrometer Technology:** It will track these emissions by **measuring hundreds of wavelengths of light** that are reflected by Earth's surface.
- **Significance:** It will be able to **measure point-source** emission on a global scale

4.Sonoluminescence

Sonoluminescence (SL) is a scientific phenomenon that occurs when a **gas bubble in a liquid emits light** after being subjected to intense **sound waves**.

About Sonoluminescence:

- **Discovery:** In 1934, two **German engineers studying sonar technology** discovered a curious phenomenon.
- **Phenomenon:** They observed that when a **small bubble in a liquid** is exposed to powerful sound waves, it **emits a flash of light**.
- **Mechanism:**
 - Sound waves create alternating **high- and low-pressure phases**.
 - These phases cause the bubble to **rapidly expand and collapse**.
 - During collapse, the bubble **compresses intensely**, causing internal temperatures to soar to several thousand kelvin.
 - The extreme temperature causes **gases within the bubble to ionise**.
 - This ionisation releases **light energy** in about a trillionth of a second.
 - The exact mechanism of light production is **still unknown**.

Natural Occurrence in Pistol Shrimp:

- **Pistol Shrimp (Family Alpheidae):**
 - Possess a **specialised claw** capable of snapping shut at incredible speed.
 - This action creates a **jet of water** that forms a low-pressure bubble.
 - The bubble's collapse produces a loud sound, intense heat, and sometimes a **brief flash of light**.

5.FSSAI Announces Curbs on Dairy Products

The **Food Safety and Standards Authority of India (FSSAI)** has recently issued a **directive to food businesses** to remove claims related to **'A1' and 'A2' types of milk** from their product descriptions.

Overview of Classification Of Dairy Products As 'A1' and 'A2':

- **Classification:** Several FBOs (Food Business Operators) are selling milk and milk products in the **name of A1 and A2**.

- **Recognition of Classification:** FSSAI regulations **do not officially recognise this distinction**, leading to the current mandate to eliminate these claims.
- **Differentiation:** Based on the **structural differences in beta-casein protein**.
- **Beta-Casein:** It is one of the major proteins found in milk, and it comes in **two main variants: A1 and A2**.
 - Historically, cows produced **only A2 beta-casein**.
 - However, due to **genetic mutations**, some cows began to **produce A1 beta-casein** as well.
- **Key Difference:** It lies in the **amino acid structure**.
 - A1 beta-casein has a **histidine amino acid** at position 67.
 - While A2 beta-casein has **proline** at the same position.

6.Three New Ramsar Sites added

India has recently designated three new Ramsar sites. This increases the total number of Ramsar sites in the country to 85. The combined area covered by these sites has now reached an impressive 1,358,068 hectares.

Nanjarayan Bird Sanctuary, Tamil Nadu

About: It is a vast, shallow wetland located in Tamil Nadu.

2. This lake covers an area of 125.865 hectares.

3. The sanctuary is named after King Nanjarayan, who historically restored the lake.

River flowing through it It is located on the banks of the Noyyal River.

Significance : It plays a crucial role as a feeding and nesting ground for both resident and migratory birds and serves as an essential water source for local agricultural activities.

Biodiversity : This sanctuary is home to a diverse range of species, including 191 bird species, 87 butterfly species, 7 amphibians, 21 reptiles, 11 small mammals, and 77 plant species.

Fauna Pelicans, painted storks, coots, Eurasian coot, spot-billed duck, and numerous herons are commonly found here.

Kazhuveli Sanctuary, Tamil Nadu

- It is located on the Coromandel Coast, Tamil Nadu.
- This shallow brackish lake connects to the Bay of Bengal via the Uppukalli Creek and Edayanthittu Estuary.
- It covers 5,151.6 hectares and was declared Tamil Nadu's 16th bird sanctuary in 2021.
- It consists of salt marshes, mudflats, and shallow waters.
- It helps in flood control and groundwater recharge.
- The lake serves as a feeding ground for long-distance migratory birds from the cold subarctic regions of Central Asia and Siberia, such as Black-tailed Godwits, Eurasian Curlews, White Storks, Ruffs, and Dunlins.
- It supports numerous globally endangered species, including the black-headed ibis and greater flamingo.
- It includes degraded mangrove patches featuring Avicennia species in the brackish water zones, and extensive reed beds spread over hundreds of acres.

Tawa Reservoir, Madhya Pradesh

- Tawa Reservoir is located in Madhya Pradesh.
- It is located within the Satpura Tiger Reserve, marking the western boundary of Satpura National Park and Bori Wildlife Sanctuary.
- It is located at the confluence of the Tawa and Denwa rivers.
- It provides irrigation water for surrounding farmlands and supplies drinking water to local communities.
- It also serves as a major wintering ground for migratory birds.

ANSWER WRITING

Q. Analyze the challenges faced by Persons with Disabilities (PwDs) in India in accessing education and employment opportunities, and suggest measures to enhance their inclusion and representation in these sectors.

Persons with Disabilities (PwDs) in India constitute about **2.21%** of the population, according to the **Census 2011**. The government has introduced various policies to support PwDs, yet significant barriers persist in accessing education and employment. Addressing these challenges is crucial to ensuring an **inclusive** society that respects the **rights** and **dignity of all** individuals.

Challenges Faced by PwDs in Accessing Education in India:

- **Lack of Inclusive Infrastructure:** Many educational institutions lack **disabled-friendly facilities** such as ramps, elevators, and accessible restrooms, making it difficult for PwDs to navigate campuses.

For instance: According to the **National Centre for Promotion of Employment for Disabled People**, less than **40%** of schools have ramps, and only **17%** have **accessible toilets**.

- **Inadequate Learning Materials:** There is a scarcity of Braille books, audio materials, and other assistive technologies in most educational institutions, **limiting access to information and learning** for students with disabilities.

For instance: As per the **Ministry of Social Justice and Empowerment**, only a few **government-funded schools** provide study materials in accessible formats for visually impaired students.

- **Limited Teacher Training:** Many teachers are not trained in **special education** or **inclusive teaching methods**, which hampers their ability to effectively support PwDs in mainstream classrooms.

For instance: The **Rehabilitation Council of India** reports that less than **1%** of teachers are trained in inclusive education practices.

- **Social Stigma and Discrimination:** PwDs often face social stigma and discrimination from peers and educators, which can lead to **isolation** and **lower self-esteem**, affecting their academic performance.

For instance: A survey by the **Ministry of Education** found that students with disabilities in mainstream schools often face **bullying** and **exclusion**.

- **Financial Constraints:** Many families of PwDs face financial challenges and cannot afford the **additional costs** associated with **special education**, such as transportation, assistive devices, and therapy.

For instance: The **Department of Empowerment of Persons with Disabilities** highlights that over **70%** of families with disabled children struggle to meet educational expenses.

Challenges Faced by PwDs in Accessing Employment Opportunities in India:

- **Workplace Accessibility:** Many workplaces lack **basic accessibility features**, such as ramps, elevators, and accessible restrooms, making it difficult for PwDs to access and function in their work environment.

For instance: A study by **NASSCOM** found that less than **5%** of **offices** in India are fully accessible to people with disabilities.

- **Lack of Awareness and Sensitization:** Employers often lack awareness about disabilities and are not sensitised to the needs of PwDs, leading to **reluctance in hiring** them.

For instance: Despite the Rights of Persons with Disabilities Act, many **companies lack inclusive hiring policies**.

- **Skill Gaps and Training Opportunities:** PwDs often do not have access to **vocational training** and **skill development programs** that cater to their specific needs, limiting their employability.

For instance: According to the **National Skill Development Corporation**, only **2%** of training centres are equipped to train PwDs in various trades.

- **Discrimination and Prejudice:** Many employers hold prejudiced views about the capabilities of PwDs, resulting in discriminatory **hiring practices** and **lower wages**.

For instance: A survey by the **Disability Rights Alliance** found that PwDs are often paid **20-30%** less than their non-disabled counterparts for the same role.

- **Lack of Assistive Technologies:** There is a **limited availability** of assistive devices and technologies that can help PwDs perform their job functions effectively.

For instance: The **Ministry of Labour and Employment** noted that less than **10%** of PwDs have access to necessary assistive technology in the workplace.

Measures to Enhance Inclusion and Representation of PwDs:

- **Infrastructure Development:** Invest in making educational institutions and workplaces **physically accessible** by building ramps, installing elevators, and providing accessible restrooms.

For example: The Government of India's **Sugamya Bharat Abhiyan** aims to make public and private spaces accessible, including schools and workplaces.

- **Teacher and Employer Training:** Provide **mandatory training** for teachers and employers on inclusive education and workplace practices to ensure they are equipped to support PwDs.

- **Financial Support and Scholarships:** Offer scholarships and financial assistance to families of PwDs to reduce the **economic burden** of special education and additional services.

For example: The **National Fellowship for Persons with Disabilities** provides scholarships to PwDs pursuing higher education.

- **Policy and Legal Reforms:** Strengthen the enforcement of existing laws such as the **Rights of Persons with Disabilities Act, 2016** to ensure compliance by educational institutions and employers.

For example: The **Department of Empowerment of Persons with Disabilities** has introduced **strict penalties** for non-compliance with accessibility norms.

- **Promote Inclusive Technologies:** Develop and subsidise the use of **assistive technologies** that enable PwDs to participate fully in education and employment.

For example: The Government of India's initiative to provide free assistive devices to PwDs under the **Assistance to Disabled Persons scheme**.

To achieve **true inclusivity** for Persons with Disabilities by **2047**, India must focus on creating **accessible education and employment environments**, enhancing legal frameworks, and raising public awareness. By adopting a holistic approach that integrates infrastructure development, policy reforms, and societal change, India can ensure that PwDs have equal opportunities to contribute to the nation's growth and development.

MCQ

- Consider the following statements:
 - The Brahmaputra River originates from the Sedongpu glacier.
 - The Brahmaputra River forms a deep gorge while flowing around Mt. Namcha Barwa and Mt. Gyala Peri.
 - Lhasa River, Lohit River, and Dhanashri River are the right bank tributaries of Brahmaputra.

Which of the above statements is/are correct?

 - 1 only
 - 1 and 3 only
 - 2 only**
 - 2 and 3 only
- Consider the following statements about Tanager-1 Satellite:
 - Tanager-1 satellite is designed to detect major emitters of PM 2.5 and Ozone.
 - Tanager-1 uses imaging spectrometer technology.

Which of the statements given above is/are correct?

 - 1 only
 - 2 only**
 - Both 1 and 2
 - Neither 1 nor 2
- Consider the following statements:

Statement-I: The Rights of Persons with Disabilities Act, 2016 provides for reservations of disables in government jobs and incentives in non-government jobs.

Statement-II: Article 16 of the Indian Constitution directs the state to make provisions for securing the right to work, education, and public assistance in cases of disablement.

Which one of the following is correct in respect of the above statements?

 - Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
 - Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
 - Statement-I is correct but Statement-II is incorrect**
 - Statement-I is incorrect but Statement-II is correct
- Consider the following statements regarding the Unified Pension Scheme (UPS):
 - It ensures that government employees receive a pension equal to 50% of their average basic pay from the last 12 months before retirement, as long as they have served for at least 25 years.
 - Variable pension contributions feature of the UPS ensures that pensions keep pace with inflation.
 - It is available to both government and private sector employees.
 - In the event of an employee's death, the family will receive a pension amounting to 60% of the employee's pension.

How many of the statements given above are correct?

 - Only one
 - Only two**
 - Only three
 - All four
- Consider the following statements regarding Classical Languages in the India:
 - At present, there are six languages that enjoy the 'Classical' status in India.
 - Sanskrit was the first language in India to be accorded classical language status in 2004.
 - All the Classical Languages are listed in the Eighth Schedule of the Constitution.

Which of the above statements is/are correct?

 - 1 and 2 only
 - 1 and 3 only**
 - 2 and 3 only
 - 1, 2, and 3
- Consider the following statements about antimatter:
 - Antimatter is composed of antiparticles, which have the same mass as ordinary matter particles but possess opposite electric charges.

2. The antimatter counterpart of an electron is the positron, which has a positive charge.
3. When matter and antimatter come into contact, they annihilate each other, releasing energy.
- Which of the statements given above is/are correct?
- a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2, and 3
7. Which of the following statements is/are correct regarding the potential benefits and marketing claims of A2 milk?
1. A2 milk is often marketed as a healthier option compared to regular milk.
2. Some individuals with lactose intolerance report better tolerance with A2 milk due to its different protein composition.
3. A2 milk is scientifically proven to be a complete cure for lactose intolerance.
- Select the correct answer using the codes given below:
- a) **1 and 2 only**
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2, and 3
8. Which of the following correctly describes the difference between a lithium atom and an antilithium atom?
- a) A lithium atom has neutrons, while an antilithium atom does not.
- b) A lithium atom consists of protons, neutrons, and electrons, whereas an antilithium atom consists of antiprotons, antineutrons, and positrons.**
- c) A lithium atom has a positive charge, and an antilithium atom has a negative charge.
- d) A lithium atom has more mass than an antilithium atom.
9. Consider the following statements about BHISM cubes
1. The BHISHM Cube is a portable medical hospital developed as part of the Bharat Health Initiative for Sahyog, Hita, and Maitri (Project BHISHM).
2. It is specifically designed to offer rapid and comprehensive medical assistance in emergency situations.
- Which of the following statements are correct ?
- a) 1 only
b) 2 only
c) Both 1 and 2
d) None
10. In the context of International Relations, 'Strategic Partnership' refers to:
- a) The formalization of trade agreements and tariff reductions between two countries to boost economic ties.
- b) A long-term partnership between two countries covering defence, economics, technology, and diplomacy to achieve shared strategic goals.**
- c) An agreement between two countries to support each other's political campaigns and electoral processes.
- d) A temporary alliance formed between countries to address specific short-term military conflicts or regional disputes.