

GOVERNANCE**Suggestions for Delimitation Exercise**

Pranab Mukherjee Foundation (PMF), a non-governmental institution, has made suggestions for the next delimitation exercise.

Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country to represent changes in population.

Key Points

- Suggestions: The next delimitation exercise should be a two-step process:
- A Delimitation Commission should be set up to draw the boundaries as per the 2031 Census and recommend the reorganisation of States based on population.
- A State Reorganisation Act should be brought to give effect to the Delimitation Commissions' recommendations "by splitting States into smaller ones".

Current Scenario:

- The 84th Amendment to the Constitution in 2002 had put a freeze on the delimitation of Lok Sabha and State Assembly constituencies till the first Census after 2026.
- The current boundaries were drawn on the basis of the 2001 Census, the number of Lok Sabha seats and State Assembly seats remained frozen on the basis of the 1971 Census.
- The population according to the last census preceding the freeze was 50 crore, which in 50 years has grown to 130 crore, causing a massive asymmetry in the political representation in the country.

Delimitation Commission

- The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India.

Composition:

1. Retired Supreme Court judge
2. Chief Election Commissioner
3. Respective State Election Commissioners

Functions:

To determine the number and boundaries of constituencies to make the population of all constituencies nearly equal.

To identify seats reserved for Scheduled Castes and Scheduled Tribes, wherever their population is relatively large.

Delimitation Commissions have been set up four times — 1952, 1963, 1973 and 2002 under the Acts of 1952, 1962, 1972 and 2002.

The Delimitation Commission in India is a high power body whose orders have the force of law and cannot be called in question before any court.

INTERNATIONAL RELATIONS**India-Uzbekistan Virtual Summit**

In a recent virtual summit, India and Uzbekistan have deliberated on expanding bilateral ties aiming to expand cooperation in a range of areas, including new and renewable energy, digital technologies, cybersecurity and sharing of information.

The agreements also include cooperation on connectivity projects in Afghanistan and its peace process, trilateral dialogue with Iran, combatting terrorism, etc.



Key Points**Trade, Economic and Investment Cooperation:**

- Making efforts to achieve the mutually identified target of USD 1 billion for bilateral trade.
- The current bilateral trade level of about USD 285 million (2018) is far below the potential.
- Fast-track the conclusion of the ongoing Joint Feasibility Study that will pave the way for the commencement of negotiations on a Preferential Trade Agreement.
- Early conclusion of the Bilateral Investment Treaty which shall facilitate investment promotion and protection for further improvement of trade and economic cooperation.
- The sides noted the prospects for greater opportunities in the free economic zones of the two countries, including in the Uzbek-Indian free pharmaceutical zone in the Andijan region (eastern part of the Fergana Valley in far eastern Uzbekistan).
- Uzbekistan welcomed the opportunities in India for investing/manufacturing under the ‘Make in India’ programme.

Development Cooperation:

- India confirmed the approval of a USD 448 million Line of Credit for four developmental projects in Uzbekistan in the areas of road construction, sewerage treatment and information technology.

Defence and Security:

- Appreciated the enhanced pace of bilateral defence cooperation since the convening of the first meeting of Joint Working Group on Defence Cooperation in February 2019.
- Welcomed the holding of the “Dustlik 2019”, first-ever joint military exercises in November 2019.
- Agreed to further strengthen cooperation between the law enforcement agencies and special services of the two countries, including under the framework of the Uzbekistan-India Joint Working Group on Counter-Terrorism.

Civil Nuclear Energy:

- Welcomed the conclusion of the bilateral agreement between the Global Centre for Nuclear Energy Partnership (GCNEP) India and the Agency for Development of Nuclear Energy, Uzbekistan.
- GCNEP is the sixth research and development (R&D) unit under the aegis of Department of Atomic Energy (DAE) and helps in capacity building, in association with the interested countries and the International Atomic Energy Agency (IAEA).

Connectivity:

- Reiterated continued commitment for enhancing connectivity between India and Uzbekistan and in the larger Central Asian region to bolster trade and investment.
- India welcomed the proposal to hold trilateral dialogue among India, Iran and Uzbekistan to promote connectivity through the Chabahar port.
- India also requested Uzbekistan to consider joining the International North-South Transport Corridor (INSTC) which would add to the overall improvement of connectivity in the larger Eurasian space.

Culture, Education and People-to-People Contacts:

- India invited Uzbekistan to avail of increased scholarship opportunities provided by the Indian Council for Cultural Relations (ICCR) and training and capacity building under the Indian Technical and Economic Cooperation (ITEC) programme.

Terrorism:

- Strongly condemned terrorism in all its forms and manifestations and reaffirmed the determination to combat this menace by destroying terrorist safe-havens, networks, infrastructure and funding channels.
- Also underlined the need for every country to ensure that its territory is not used to launch terrorist attacks against other countries and called for early finalisation of a Comprehensive Convention on International Terrorism (CCIT).

Afghanistan:

- Called for the settlement of the Afghan conflict on the principle of Afghan-led, Afghan-owned and Afghan-controlled peace process and expressed unanimity in support for a united, sovereign and democratic Islamic Republic of Afghanistan.

Reformed Multilateralism:

- Reaffirmed that the United Nations (UN) must play a central role in maintaining global peace and security and also called for comprehensive reform of the UN structures including the Security Council with expansion in both categories of membership.
- Uzbekistan reaffirmed its support to India's candidature for permanent membership of the UN Security Council and congratulated India on its election as a non-permanent member of the UN Security Council for the term 2021-22.
- India also congratulated the Uzbek side on its successful election to the UN Human Rights Council for the term 2021-23.
- Appreciated their close cooperation in the Shanghai Cooperation Organization (SCO).
- In November 2020, India hosted the first-ever meeting of the Council of the Heads of Government of SCO since its joining the SCO.
- India appreciated Uzbekistan's support in the successful holding of the 2nd India-Central Asia Dialogue at the level of Foreign Ministers with the participation of Afghanistan.
- Uzbekistan is a member of the Organisation of Islamic Cooperation (OIC), which is the second largest intergovernmental organization after the UN.
- India is not a member of the OIC. However, India was invited as a guest of honour at the 46th Session of the Council of Foreign Minister in 2019.

Covid-19 Pandemic:

- Emphasized the need for bilateral and global cooperation to continue the fight against the pandemic including development and distribution of effective vaccines and other medicines.
- Uzbekistan thanked India for the assistance rendered to Uzbekistan in its fight against the pandemic and India reaffirmed its continued commitment.

Way Forward

- Agreements reached during various bilateral visits have strengthened cooperation between India and Uzbekistan in diverse sectors such as political, trade and investment, defence, security, counter-terrorism, science and technology, nuclear energy, space, information technology and have promoted cultural and academic linkages.
- Both countries thanked each other for the productive discussions held during the virtual summit and expressed confidence that the understandings and agreements will further deepen the strategic partnership between the two countries for the well-being of their peoples and mutual prosperity.

SCIENCE & TECHNOLOGY**P Oval Malaria**

Recently a not very common type of malaria, Plasmodium ovale, has been identified in a jawan in Kerala. The soldier is believed to have contracted it in Sudan, where Plasmodium ovale is endemic.

Key Points**About:**

- Plasmodium ovale is one among the five kinds of malarial parasites — Plasmodium falciparum, Plasmodium vivax (the commonest ones), Plasmodium Malariae, Plasmodium Ovale and Plasmodium Knowlesi.
- It is termed ovale as about 20% of the parasitised cells are oval in shape.
- The parasite can remain in the spleen or liver of the body for a long time, even years, after the mosquito bite, and the person could become symptomatic later.

Symptoms:

- Symptoms include fever for 48 hours, headache and nausea, and it rarely causes severe illness.
- Similar to P vivax:
- P ovale is very similar to P vivax and the treatment modality is the same as it is for a person infected with P vivax.
- Distinguishing between P vivax and P ovale may be tricky and can be differentiated only through careful detection.

Prevalence:

- P ovale malaria is endemic to tropical Western Africa. It is relatively unusual outside of Africa and, where found, comprises less than 1% of the isolates.
- It has also been detected in the Philippines, Indonesia and Papua New Guinea, but is still relatively rare in these areas.

Transmission in India:

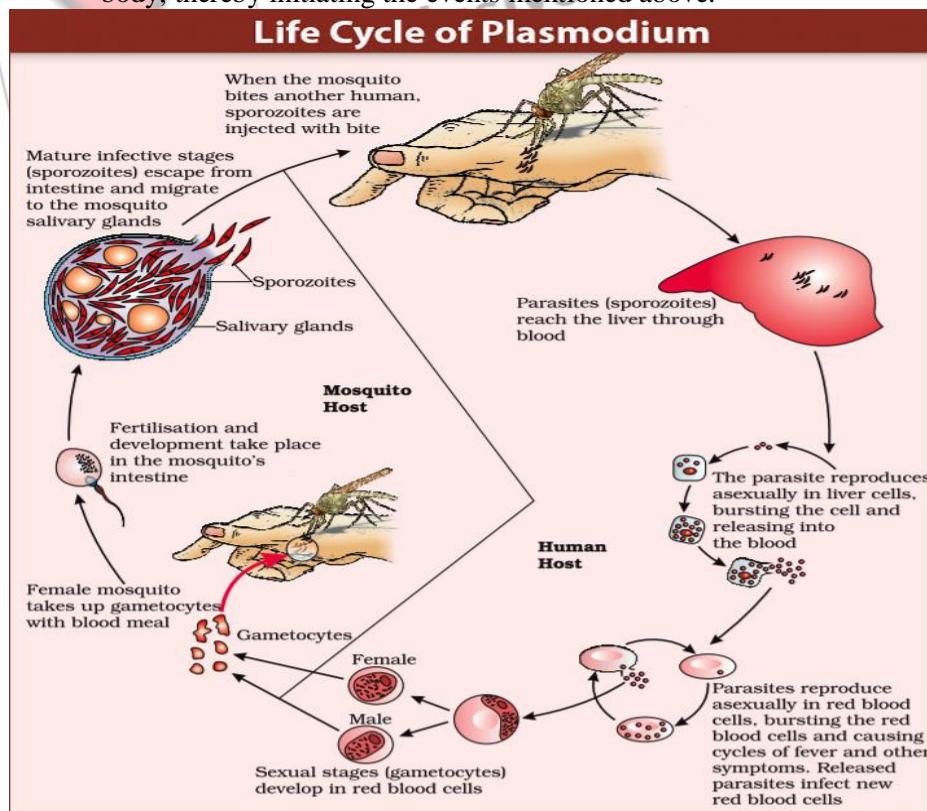
- According to the National Institute of Malaria Research (NIMR), the Kerala case could be an isolated one and there are no recorded cases of local transmission so far.
- Previously, too, isolated cases were reported in Gujarat, Kolkata, Odisha and Delhi. However, no local transmission has been recorded — which means these cases have been acquired.
- In India, out of 1.57 lakh malaria cases in the high-burden states of Odisha, Chhattisgarh, Jharkhand, Meghalaya and Madhya Pradesh in 2019, 1.1 lakh cases (70%) were cases of falciparum malaria.
- According to the recent World Malaria Report 2020, cases in India dropped from about 20 million in 2000 to about 5.6 million in 2019.

Malaria

- Malaria is caused by Plasmodium (a protozoan).
- Malaria caused by Plasmodium falciparum is the most serious one and can even be fatal.

Life Cycle of Plasmodium:

- Plasmodium enters the human body as sporozoites (infectious form) through the bite of infected female Anopheles mosquito.
- The parasites initially multiply within the liver cells and then attack the Red Blood Cells (RBCs) resulting in their rupture.
- The rupture of RBCs is associated with release of a toxic substance, haemozoin, which is responsible for the chill and high fever recurring every three to four days.
- When a female Anopheles mosquito bites an infected person, these parasites enter the mosquito's body and undergo further development.
- The parasites multiply within them to form sporozoites that are stored in their salivary glands. When these mosquitoes bite a human, the sporozoites are introduced into his/ her body, thereby initiating the events mentioned above.



Note

- It is interesting to note that the malarial parasite requires two hosts – human and mosquitoes – to complete its life cycle.
- The female Anopheles mosquito is the vector (transmitting agent) too.
- World Malaria Day is observed on 25th April.
- It can be noted that the World Health Organisation (WHO) officially endorses disease-specific global awareness days for only four diseases viz. HIV-AIDS, TB, Malaria, and Hepatitis.

BIODIVERSITY & ENVIRONMENT
Five Years of Paris Climate Accord

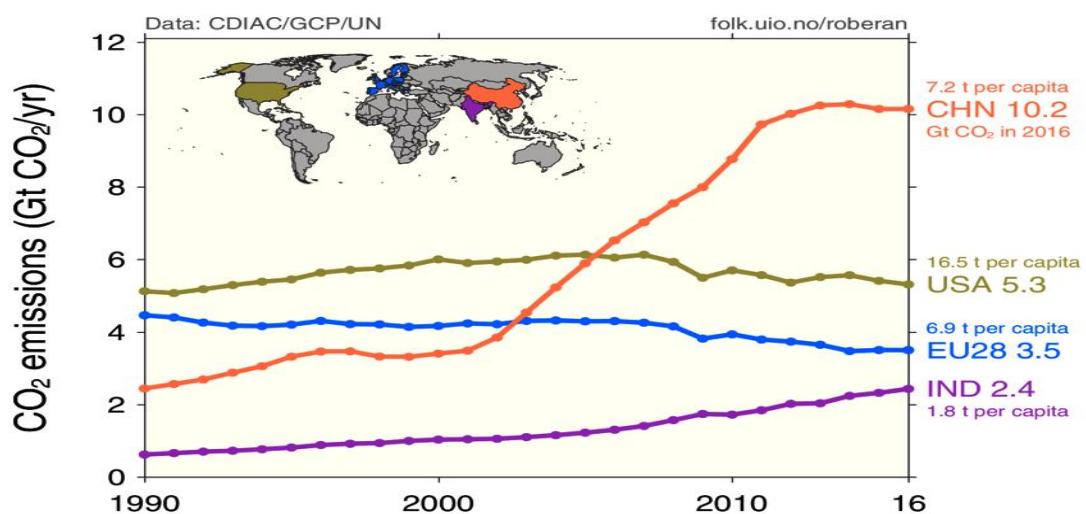
Recently, India has reiterated her commitment to the Paris Climate Accord, prior to the Climate Ambition Summit which will start from 12th December 2020 at Glasgow, Scotland.

The Climate Ambition Summit 2020 will mark the fifth anniversary of the Paris Agreement, and will provide a platform for government and non-governmental leaders to demonstrate their commitment to the Paris Agreement and the multilateral process.

Key Points
Climate Ambition Summit 2020:

Objective: To set out new and ambitious commitments under the three pillars of the Paris Agreement that are mitigation, adaptation and finance commitments.

Scope: The Summit will provide a meaningful platform for businesses, cities and other non-state actors who are rallying together and collaborating to support governments and accelerate the systemic change required to reduce emissions and build resilience.



Hosted By: The United Nations, United Kingdom and France in partnership with Chile and Italy.

History of Emissions:

- As the most abundant Greenhouse Gas (GHG) in our atmosphere, carbon dioxide (CO₂) has become a direct proxy for measuring climate change. Its levels have varied widely over the course of the Earth's 4.54 billion year history.
- Historically it's the developed countries that have been major contributors to carbon emissions.

Historical Emissions:

- The United States (US) has the highest historical emissions at 25%, followed by the European Union (EU) at 22% and China at 13%.
- India has a low carbon emission contribution of only 3%.

Paris Climate Accord

- **Legal status:** It is a legally binding international treaty on climate change.
- **Adoption:** It was adopted by 196 countries at Conference of the Parties COP 21 in Paris in December 2015.

- **Goal:** To limit global warming to well below 2° Celsius, and preferably limit it to 1.5° Celsius, compared to pre-industrial levels.
- **Objective:** To achieve the long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate-neutral world by mid-century.

Current Status of Global Emissions:

- Five years after the Paris agreement, all states have submitted their national contributions to mitigate and adapt to climate change.
- The contributions are radically insufficient to reach the well below 2 degrees Celsius limit and are even further from the 1.5 degrees Celsius temperature limit identified in the Paris Agreement.
- Besides India, only Bhutan, the Philippines, Costa Rica, Ethiopia, Morocco and Gambia were complying with the accord.
- China has the highest GHG emissions (30%) while the US contributes 13.5% and the EU 8.7%.

India's Current Emissions:

- A United Nations report released earlier this year stated that India's per capita emissions are actually 60% lower than the global average.
- The emissions in the country grew 1.4% in 2019, much lower than its average of 3.3% per year over the last decade.

Some of the Measures taken by India to Control Emissions:

- Bharat Stage (BS) VI norms: These are emission control standards put in place by the government to keep a check on air pollution.
- National Solar Mission: It is a major initiative of the Government of India and State Governments to promote ecologically sustainable growth while addressing India's energy security challenge.
- National Wind-Solar Hybrid Policy 2018: The main objective of the policy is to provide a framework for promotion of large grid connected wind-solar photovoltaic (PV) hybrid systems for optimal and efficient utilization of wind and solar resources, transmission infrastructure and land.
- All these and many other initiatives helped India in cutting CO2 emissions by 164 million kg.

Issues in Achieving the Pledged Targets:

- Most of the Nations have been slow to update their national contributions for reducing emissions for 2025-2030, however several have announced net zero emission targets in the recent past.
- Net zero emission means that all man-made greenhouse gas emissions must be removed from the atmosphere through reduction measures, thus reducing the Earth's net climate balance.
- The net zero targets are subject to credibility, accountability and fairness checks.

Credibility: The plans and policies of nations is not credible enough to meet the long term net zero targets as :

- The Intergovernmental Panel on Climate Change (IPCC) 1.5 degrees Celsius Report indicated that to stay within a reasonable chance of achieving 1.5 degrees Celsius, global CO2 emissions have to fall by 45% from the 2010 levels by 2030 but current national contributions are not on track for such a fall.

Accountability: There is limited or no accountability for the long-term net zero goals and short-term national contributions as:

- Many net zero goals have not yet been embedded in national contributions and long-term strategies under the Paris Agreement.
- In any case, accountability under the Paris Agreement is limited. States are not obliged to achieve their self-selected targets. There is no mechanism to review the adequacy of individual contributions. States are only asked to provide justifications for the fairness and ambition of their targets.

- The transparency framework does not contain a robust review function, and the compliance committee is facilitative and limited to ensuring compliance with a short list of binding procedural obligations..

Fairness: Issues of fairness and justice, both between and within generations, are unavoidable:

- There is no mechanism to check that whether the net zero targets, and pathways to net zero are fair or how much are states doing in comparison to others and relative to how much they should.

Way Forward

- To achieve this long-term temperature goal, countries should aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate-neutral world by mid-century.
- Net zero pledges need to be credible, accountable and fair to get us to a stable climate. Not all states will be in a position to pledge net zero targets, nor should they be expected to. All states, including India, can, however, pledge actions that are credible, accountable and fair.
- Credible short-term commitments, with a clear pathway to medium-term decarbonisation, that take into account the multiple challenges states face, such as on air pollution, and development, might well be the more defensible choice for some.

IMPORTANT FACTS FOR PRELIM

United Nations Population Award 2020

The Ramanujan Prize for Young Mathematicians 2020 has been awarded to Dr. Carolina Araujo, Mathematician from the Institute for Pure and Applied Mathematics (IMPA), Rio de Janeiro, Brazil.

She received the Prize for her outstanding work in algebraic geometry. Her work area focuses on birational geometry, which aims to classify and describe the structure of algebraic varieties.

Key Points

The Ramanujan Prize for Young Mathematicians from developing countries has been awarded annually since 2005.

It was originally instituted by the International Centre for Theoretical Physics (ICTP), the Niels Henrik Abel Memorial Fund, and the International Mathematical Union (IMU).

The participation of the Abel Fund ended in 2012.

ICTP: Founded in 1964 by the late Nobel Laureate Abdus Salam, it seeks to accomplish its mandate by providing scientists from developing countries with the continuing education and skills that they need to enjoy long and productive careers.

IMU: It is an international non-governmental and non-profit scientific organization, with the purpose of promoting international cooperation in mathematics.

- It is a member of the International Science Council (ISC).
- The ISC was created in 2018 and is an international non-governmental organization bringing together the natural and social sciences and the largest global science organization of its type.
- It has its office in Paris, France.
- India is a member country.

IMU Secretariat is located in Berlin, Germany.

The Department of Science and Technology of the Government of India (DST) has agreed to fund the Prize, starting with the 2014 Prize.

- It has been supported by DST in the memory of Srinivasa Ramanujan, a genius in pure mathematics who was essentially self-taught and made spectacular contributions to elliptic functions, continued fractions, infinite series, and analytical theory of numbers.
- In India, 22nd December is celebrated as National Mathematics Day in the memory of Srinivasa Ramanujan.

It is awarded to a researcher from a developing country who is less than 45 years of age on 31st December of the year of the award, and who has conducted outstanding research in a developing country.

- Researchers working in any branch of the mathematical sciences are eligible.
- The Prize carries a USD 15,000 cash award.

DAILY ANSWER WRITING PRACTICE

Qns Communalism is one of the most serious problems that India faces today. Critically examine the factors responsible and suggest ways to deal with it. (250 words)

Ans:

Communalism, in a broad sense, means a strong attachment to one's own community. In popular discourse in India, it is understood as an unhealthy attachment to one's own religion.

- The anti-Sikh riots-1984, the Babri Masjid-Ram Janmabhoomi controversy-1992, Gujarat communal riots-2002, Uttar Pradesh worst violence -2013 and recently Delhi communal riots-2020 broke out.
- Violation of Human Rights, economic loss, social dissonance and erosion of Constitutional values are some of the worst impacts aftermath of riots.

Factors responsible for communalism:

Divisive Politics: Communalism is often defined as a political doctrine that makes use of religious and cultural differences in achieving political gains.

Economic Causes: Uneven development, class divisions, poverty and unemployment aggravates insecurity in the common men which make them vulnerable to political manipulation.

Politics of Appeasement: Prompted by political considerations, and guided by their vested interests, political parties take decisions which promote communal violence.

Isolation and Economic Backwardness of Muslim Community: The failure to adopt the scientific and technological education and thus, insufficient representation in the public service, industry and trade etc has led to the feeling of relative deprivation among Muslims.

The resurgence of Hindu-Muslim economic competition, especially among the lower and middle class strata has fuelled the communal ideology.

Administrative Failure: A weak law and order is one of the causes of communal violence.

Psychological Factors: The lack of interpersonal trust and mutual understanding between two communities often result in perception of threat, harassment, fear and danger in one community against the members of the other community , which in turn leads to fight, hatred and anger phobia.

Social Media: It is often accused of sensationalism and disseminates rumours as "news" which sometimes resulted into further tension and riots between two rival religious groups.

Measures to Deal with Communalism

- There is a need to reform in the present criminal justice system, speedy trials and adequate compensation to the victims, may act as a deterrent.
- Increase in representation of minority communities and weaker sections in all wings of law-enforcement, training of forces in human rights, especially in the use of firearms in accordance with UN code of conduct.
- Codified guidelines for the administration, specialised training for the police force to handle communal riots and setting up special investigating and prosecuting agencies can help in damping major communal disgruntlement.
- Emphasis on value-oriented education with focus on the values of peace, non-violence, compassion, secularism and humanism as well as developing scientific temper (enshrined as a fundamental duty) and rationalism as core values in children both in schools and colleges/universities, can prove vital in preventing communal feelings.
- The Hong Kong model of combating communalism by setting up a "Race Relation Unit" to promote racial harmony and facilitate integration of ethnic minorities, can be emulated by India.
- Government can encourage and support civil society and NGOs to run projects that help create communal awareness, build stronger community relations and cultivate values of communal harmony in the next generation.
- There is a need for minority welfare schemes to be launched and implemented efficiently by administration to address the challenges and various forms of discrimination faced by them in jobs, housing and daily life.

- A legislation is required to curb the communal violence. Communal Violence (Prevention, Control and Rehabilitation of Victims) Bill, 2005 must be enacted soon.

Conclusion

Maintaining communal harmony and respecting pluralism in a country as diverse as India can be a challenge. However, it is important to address the collective conscience of people of the country to uphold the constitutional values like fraternity and secularism.

A strong nation, which is built by the contribution of communities working together for its prosperity can further contribute to the maintenance of global peace and harmony.

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?

- 1 and 2 only
- 3 only**
- 2 and 3 only
- 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?

- 1 only**
- 2 only
- Both 1 and 2
- 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?

- 1 only
- 2 only
- Both 1 and 2**
- 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?

- 1 only
- 2 only
- Both 1 and 2
- 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?

- 1 only
- 2 only**
- Both 1 and 2
- Neither 1 nor 2