

POLITY

❖ **The role of Parliamentary Committees**

➤ **CONTEXT:** During the course of the 17th Lok Sabha, only 14 Bills have been referred for further examination so far. As per data from PRS, as little as 25% of the Bills introduced were referred to committees in the 16th Lok Sabha, as compared to 71% and 60% in the 15th and 14th Lok Sabha respectively. This represents a declining trend of national legislation being subjected to expert scrutiny.

- Due to the sheer volume of information and scale of operations that the Indian Parliament is required to undertake, it is not feasible to take up all issues on the floor of the House. Thus, Parliamentary committees (panels made up of MPs) are constituted to deal with such situations and take up sector-specific concerns. Contrary to popular perception, looking into Bills is not the only purpose that committees serve.
- We tend to underestimate their relevance, not realising the sheer magnitude of effort that goes into making Parliament a dynamic, functional space where members converge every few months and debate on matters that concern the nation.
- Behind every such speech, every comment and every Bill introduced or taken up for discussion lies the ceaseless work of various committees that deserve a nuanced perusal if we are to understand how the highest platform of multilateral dialogue in India is brought to life.

➤ **The evolution of committees**

- Even though a structured committee system was only established in 1993, individual committees were being formed for various reasons as far back as independence. For instance, five of the many crucial committees of the Constituent Assembly are worth a mention here.
- The Ad Hoc Committee on the Citizenship Clause, as the name suggests, was formed to discuss the nature and scope of Indian citizenship.
- Two other very significant committees were the Northeast Frontier (Assam) Tribal and Excluded Areas Sub-Committee (July 28, 1947) and the Excluded and Partially Excluded Areas (Other than Assam) Sub-Committee (August 18, 1947).

✓ The former, chaired by Sh. G.N. Bordoloi, covered the Naga, Khasi, Garo, Jaintia and Mikir Hills and collected a reservoir of people's lived experiences and demands, beliefs and customs. It looked at the status of land and forests, local government and courts, finance and taxation, making its report invaluable for determining the status quo of the region and bestowing rights/privileges accordingly.

✓ The latter was characterised by Sh. Jaipal Singh Munda's Minute of Dissent with regard to scheduled areas in the Chhota Nagpur Plateau. A towering Adivasi leader, Munda objected to the exclusion of Manbhum, Hazaribagh and Palamau districts from the ambit of the report. He claimed that all the witnesses had been "emphatic" that all six districts in question must form a consolidated territory for the purposes of scheduling. Not just for administrative reasons but also to protect the interests of the 14,79,485 Adivasis inhabiting the three excluded districts from the veto of the Tribes Advisory Council. Sh. A.V. Thakkar, the Chairman, took note of the Minute but concluded that it lacked merit and "the award of the Boundary Commission is unalterable".

- Then there was the Expert Committee on Financial Provisions of the Union Constitution (December 5, 1947), which was responsible for giving recommendations on Union and Province (State) tax collection, central excise duty, liquor revenue, divisible pool of income tax, sharing of proceeds among provinces, residuary powers, and the institutions of the Finance Commission and the Auditor General, among other things.
- The Advisory Committee on the Subject of Political Safeguards for Minorities (May 11, 1949), chaired by Sardar Patel, looked at the abolition of reservations for religious minorities.
- So, in essence, committees have been doing monumental work since the unveiling of independent India. Today, both the Lok Sabha and the Rajya Sabha have their own Standing (permanent) Committees and Ad Hoc (need-based) Committees. There are also Joint Committees with representation from both Houses.

➤ **The role of committees**

- Committees go into the details of a specific piece of legislation, analyse the impact it may have on governance indicators, and then make their recommendations.
- The government is required to table an 'Action Taken' report for the House to judge the progress made on the suggestions of the committee.

- Even though committee reports aren't binding on the government, it helps the legislature ensure an oversight on the executive.
- For instance, during the recently concluded Budget Session, reports tabled on the Demand for Grants highlighted certain inconsistencies on the part of the government.
- The Committee on Rural Development & Panchayati Raj in its report noted that the revised estimates always fell short of the budget estimates. More importantly, the actual figures are also way less.
- In 2022-23, the Ministry of Panchayati Raj has been able to spend only ₹701 crore out of the allocation of ₹905 crore, approximately, at the revised estimates stage. Such objective assessments are only possible in the confines of a committee room, where partisan divides dissolve to make way for consensus.
- ✓ The alternative scenario, that is discussion on the floor of the House, involves glaring cameras that nudge parliamentarians to perform as per their respective party-lines and voter-base.
- There also exists the Business Advisory Committee which prepares the entire schedule of both Houses when Parliament is in session. Interestingly, papers laid on the table of the House have a whole committee dedicated to them.
- ✓ So, the seemingly insignificant few minutes at the very beginning of each sitting which are utilised to lay said papers are actually backed by a well-oiled machinery of members.
- ✓ Each individual paper is prepared after a careful and often long-drawn process of deliberation, writing and screening. A lot goes into the functioning of Parliament and the committees shoulder a big chunk of that responsibility.
- **Current progress**
- Perhaps the most salient work done by a committee in recent years is on the Digital Data Protection Bill.
 - ✓ Beginning in 2017 in the wake of the *Puttaswamy* judgment that recognised privacy as a fundamental right, the Justice Srikrishna Committee was formed and tasked with preparing a data protection framework for India.
 - ✓ It presented the final 166-page report in 2018, covering everything from data processing and storage to rights and enforcement — on the basis of which the Personal Data Protection Bill, 2019 was tabled in the Lok Sabha.
 - ✓ It was referred to another committee, this time a Joint Parliamentary Committee chaired by P.P. Chaudhary, whose report came out in December 2021, following which the bill was withdrawn and a new Draft Digital Data Protection Bill was introduced for public consultation in November 2022.
 - ✓ In each iteration, the committees' insights have not only been invaluable but also formed the very basis of what is possibly the single most crucial legislation for a growing economy in the digital age.
- Several important laws such as the Prohibition of Child Marriage (Amendment) Bill that seeks to raise the legal marriageable age of women to 21, the Anti-Maritime Piracy Bill that brings into enactment the UN Convention on the Law of the Sea for combating piracy in the high seas, the Jan Vishwas Bill that amends 42 laws across sectors like agriculture and media, the Wildlife Protection (Amendment) Bill that extends the scope of protected species, the Competition (Amendment) Bill, the Electricity (Amendment) Bill, the Criminal Procedure (Identification) Bill, and the Multi-State Cooperative Societies (Amendment) Bill have all been referred to Committees.
- Another important mandate of Committees is to go into issues that are crucial from a nation-building standpoint but don't hold as much political significance.
 - ✓ Take the example of defence shipyards. These shipyards are not a primary poll issue. However, it is extremely important to develop these capabilities for safeguarding the security of the nation.
 - ✓ While next to no questions have been asked in the Lok Sabha on defence shipyards, the Public Accounts Committee highlighted several concerns plaguing the same in a 2015 report including but not limited to audit findings about inadequate shipbuilding practices, frequent mid-course changes, delays in finalisation of weapon packages, and an underestimation of costs by shipyards.
- **The road ahead**
- In the U.S., committees play a crucial role and Bills are referred to them post introduction for scrutiny. It allows changes to be made and the modified Bill to go for voting.
- The Parliament could consider a compulsory referral, for the Bills that are tabled on the floor, to the appropriate committees.

- Arming them with more powers will help them ensure accountability from the executive instead of making them toothless tigers.
- It is essential for the parliamentary ecosystem in India to institutionalise such procedures and not allow political considerations to hasten law-making.

SCIENCE AND TECHNOLOGY

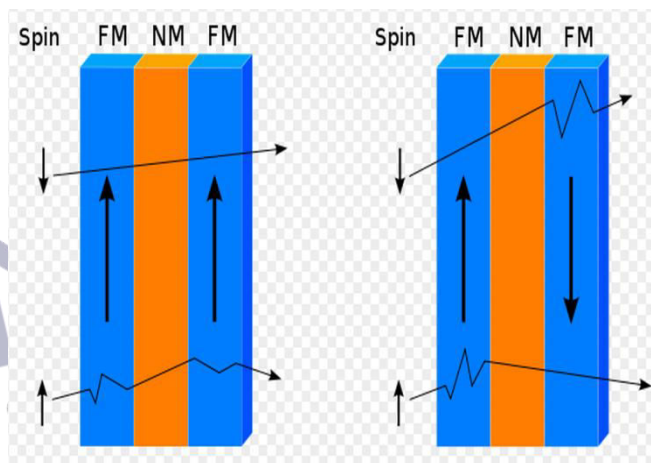
❖ **Magnetoresistance**

➤ **CONTEXT: Researchers in the UK, led by Nobel laureate Andre Geim, have discovered another property of graphene (a single-atom-thick layer of carbon atoms bonded in a honeycomb pattern) that further distinguishes this ‘wonder’ material.**

- Reserchers found that graphene displays an anomalous giant magnetoresistance (GMR) at room temperature.
- GMR is the result of the electrical resistance of a conductor being affected by magnetic fields in adjacent materials.
- It is used in harrdisk drives and magnetoresistive RAM in computers, biosensors, automotive sensors, microelectromechanical systems, and medical imagers.
- GMR-based devices are particularly used to sense magnetic fields. The new study has found that a graphene-based device, unlike conventional counterparts, wouldn’t need to be cooled to a very low temperature to sense these fields.

➤ **What is GMR?**

Figure 1 An illustration of the circumstance in which GMR appears. The big arrows indicate the direction of the magnetic field. ‘FM’ stands for ferromagnetic material and ‘NM’ for non-magnetic material.



- Say a conductor is sandwiched between two ferromagnetic materials (commonly, metals attracted to magnets, like iron). When the materials are magnetised in the same direction, the electrical resistance in the conductor is low. When the directions are opposite each other, the resistance increases. This is GMR.

- The magnetoresistance observed in the graphene-based device was “almost 100-times higher than that observed in other known semimetals in this magnetic field range.
- The effect is due to the way electrons in the conductor scatter off electrons in the ferromagnets depending on the orientation of the latter’s spin, which is affected by the direction of the magnetic field.

- Conventional GMR devices are cooled to low temperatures to suppress the kinetic energy of their constituent particles, keeping them from deflecting the electrons moving past them. In graphene, the researchers found this suppression unnecessary.

➤ **What did the study find?**

- In their study, the magnetoresistance in monolayer graphene at 27° C held between two layers of boron nitride increased by 110% under a field of 0.1 tesla. To compare, the magnetoresistance in these conditions increases by less than 1% in normal metals.
 - The team attributed this to the presence of a ‘neutral’ plasma and the electrons’ mobility.
 - Plasma is usually a gas of charged particles. But in the experiment, the “plasma consists of equal

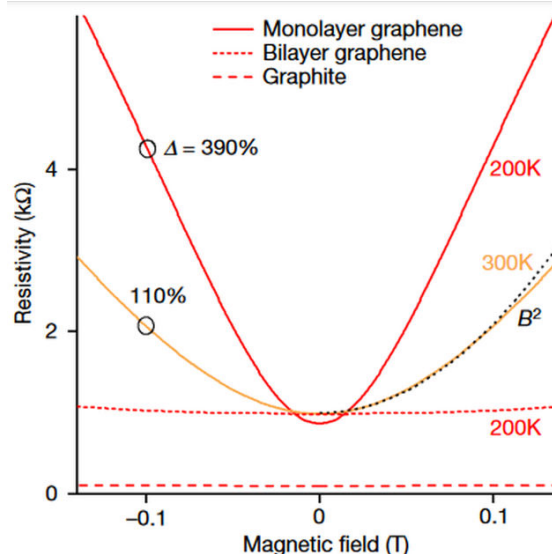


Figure 2 The magnetoresistivity of monolayer graphene used in the study (solid red line) versus the magnetic field strength.

numbers of thermally excited electrons and holes.

- A 'hole' is a site where an electron is supposed to be but isn't, thus behaving as if it is positively charged. The researchers had 'tuned' the graphene to have as many electrons as holes. "As a result, the total charge of this plasma is zero" – which is desirable because it stifles an effect that comes in the way of GMR.
- Second, the researchers used an "extremely clean" setup and graphene without "any defects". The electrons in the neutral plasma weren't scattered by vibrations in the atomic lattice either.
- Together, the electrons in the material had "anomalously high" mobility at room temperature.
- A graphene-based GMR device can't replace existing devices because the latter have other properties that the former doesn't. For example, as magnetic fields are applied and removed, the conductor's resistivity in the two types of devices evolves differently.
- it's possible that it will be used in novel applications that require magnetic-field sensing in extreme conditions.

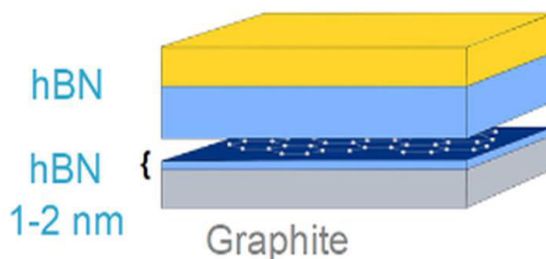


Figure 3 A schematic diagram showing the placement of monolayer graphene and the hexagonal boron nitride layers.

➤ **What is graphene?**

- It is a two-dimensional form (allotrope) of carbon that consists of a single layer of carbon atoms arranged in a hexagonal lattice.
- Graphene has been described as wondrous stuff — of being the strongest material ever tested, almost 300 times stronger than steel.
- It is also the best heat- and electricity-conducting material to be discovered.
- It could also become a valuable aid in filtering water.
- Researchers from Australia announced recently that they used a graphene-based product to make a water filter that can make highly-polluted sea water drinkable after just one pass.

PRELIMS

1. Jupiter Icy Moons Explorer (Juice)

➤ **CONTEXT: The European Space Agency (ESA) is all set to launch the Jupiter Icy Moons Explorer, or Juice, mission from its spaceport in French Guiana on an Ariane 5 launcher.**

- Planned to reach Jupiter in 2031, the mission aims to carry out a detailed exploration of the Solar System's largest planet and its icy moons, which potentially have habitable environments.
- Juice has been constructed by an industrial consortium led by Airbus Defence and Space (a division of the Airbus group responsible for the development and manufacturing of the corporation's defence and space products) based on the parameters provided by the **ESA**.
- **Only two other spacecraft have ever examined Jupiter:** the Galileo probe, which orbited the gas giant between 1995 and 2003, and Juno, which has been circling the planet since 2016.
- Notably, by the time Juice reaches Jupiter, another spacecraft, NASA's Europa Clipper, would already be orbiting the planet — scheduled to be launched in October 2023, Europa Clipper would arrive at Jupiter in 2030 and aims to study its Europa moon.

➤ **What is the Jupiter Icy Moons Explorer (Juice) mission?**

- The Juice "will make detailed observations of the giant gas planet and its three large ocean-bearing moons — Ganymede, Callisto and Europa", by using remote sensing, geophysical and in situ instruments.
- Scientists for quite some time have known that these three moons of Jupiter possess icy crusts, which they believe contain oceans of liquid water underneath, making them potentially habitable. Juice will help probe these water bodies by creating detailed maps of the moons' surfaces and enable the scientists, for the first time, to look beneath them.
- Although the mission will examine all three moons, the main focus will be on Ganymede, as it is the largest moon in the Solar System (larger than Pluto and Mercury) and the only one to generate its own magnetic field. Juice, which will move into Ganymede's orbit after approximately four of arriving at Jupiter, will "use its suite of ten sophisticated instruments to measure how Ganymede rotates, its

gravity, its shape and interior structure, its magnetic field, its composition, and to penetrate its icy crust using radar down to a depth of about nine km.

- Another primary goal of the mission is to create a comprehensive picture of Jupiter by trying to understand its origin, history and evolution.
 - ✓ Scientists believe that this would help them provide “much-needed insight into how such a planetary system and its constituents are formed and evolved over time, as well as revealing how possibly habitable environments can arise in Jupiter-like systems around other stars.
- Juice will also analyse the chemistry, structure, dynamics, weather, and climate of Jupiter and its ever-changing atmosphere.
- **Is Juice capable of detecting life?**
- As the three moons, Ganymede, Callisto and Europa, are believed to hold immense amounts of water, which could be around six times more than the volume of water in Earth’s oceans, there is a possibility that life is present on them.
- According to European Space Agency (ESA), life on these moons could be in the form of microbes. “More advanced species might also be present, like the ones we detect in deep-sea trenches and at hydrothermal vents on Earth, such as various kinds of coral, worm, mussel, shrimp and fish.
- However, Juice isn’t equipped to detect life. What it is capable of is finding out whether there could be places around Jupiter, inside the icy moons, where the necessary conditions, such as water, biological essential elements, energy, and stability, to sustain life are present.
- According to scientists if life exists on these moons and that’s very hard to access. This is because it’s not yet possible to go very deep underneath the ice crusts, where life might be present.

2. The ratna categories of industries

➤ **CONTEXT: Solar Energy Corporation of India (SECI) gets 'Miniratna Category-I' status**

➤ **About SECI:**

- It is a Central Public Sector Enterprise (CPSE) which was incorporated in the year 2011.
- SECI is the primary implementing agency of the Ministry of New and Renewable Energy for Renewable Energy schemes/projects towards fulfillment of India's international commitments.

➤ **Criteria for Maharatna status**

- Having Navratna status
- Listed on Indian stock exchange with minimum prescribed public shareholding under SEBI regulations
- An average annual turnover of more than Rs. 25,000 crore during the last 3 years
- An average annual net worth of more than Rs. 15,000 crore during the last 3 years
- An average annual net profit after tax of more than Rs. 5,000 crore during the last 3 years
- Should have significant global presence/international operations.

➤ **Criteria for Navratna status**

- The CPSEs which are Miniratna I, Schedule ‘A’ and have obtained ‘excellent’ or ‘very good’ MOU rating in three of the last five years are eligible to be considered for grant of Navratna status.

➤ **Criteria for Miniratna status**

- Miniratna Category-I status: The CPSEs which have made profit in the last three years continuously, pre-tax profit is Rs.30 crores or more in at least one of the three years and have a positive net worth.
- Miniratna Category-II status: The CPSEs which have made profit for the last three years continuously and have a positive net worth.
- Miniratna CPSEs should have not defaulted in the repayment of loans/interest payment on any loans due to the Government.
- Miniratna CPSEs shall not depend upon budgetary support or Government guarantees.

3. Language Friendship Bridge project

➤ **CONTEXT: India is planning to create a pool of experts in languages spoken in countries like Myanmar, Sri Lanka, Uzbekistan and Indonesia to facilitate better people-to-people exchanges.**

- The Indian Council for Cultural Relations (ICCR) has envisaged a special project called ‘The Language Friendship Bridge’, which plans to train five to 10 people in the official languages of each of these countries.
- As of now, the ICCR has zeroed in on 10 languages: Kazakh, Uzbek, Bhutanese, Ghoti (spoken in Tibet), Burmese, Khmer (spoken in Cambodia), Thai, Sinhalese and Bahasa (spoken in both Indonesia and Malaysia).

- In India, the language learning focus till now has been on European languages like Spanish, French and German, along with the languages of major Asian economies like China and Japan. Though a number of universities and institutes offer courses in these languages, only a handful teach any of the 10 languages on the ICCR list.
- The cultural body is in discussion with universities and institutes as well as experts offering foreign language courses in the country on the modalities of implementing the project.
- **ICCR- The Indian Council for Cultural Relations (ICCR)**
- It is an autonomous organisation of the Government of India, involved in India's global cultural relations, through cultural exchange with other countries and their people.
- It was founded on 9 April 1950 by Maulana Abul Kalam Azad, the first Education Minister of independent India.
- The Council addresses its mandate of cultural diplomacy through a broad range of activities. In addition to organising cultural festivals in India and overseas, the ICCR financially supports a number of cultural institutions across India, and sponsors individual performers in dance, music, photography, theatre, and the visual arts.
- It also administers the Jawaharlal Nehru Award for International Understanding, established by the Government of India in 1965, whose last award was in 2009

ANSWER WRITING

Q. What are the key challenges facing India's tourism sector and what are some potential solutions to these challenges?

- Introduction Tourism is a significant contributor to India's economy, accounting for 9.2% of the country's GDP and employing over 80 million people (about twice the population of New York).
- India's rich cultural heritage, diverse landscape, and hospitality make it an attractive destination for tourists. However, despite its vast potential, India's tourism industry faces several challenges that hinder its growth potential.

Key Challenges Facing India's Tourism Sector:

- **Inadequate Infrastructure:** India's tourism infrastructure, including airports, highways, and public transportation, is inadequate and often outdated. Many tourist destinations lack basic amenities such as clean water, sanitation facilities, and healthcare services.
- Additionally, the lack of tourist-friendly infrastructure, such as well-placed signboards and tourist information centers, makes it challenging for visitors to navigate and explore India's tourist destinations.
- **Safety and Security:** Concerns India has been grappling with safety and security concerns for tourists, particularly women travelers.
- Incidents of harassment and violence against tourists have been reported, leading to a decline in tourism in recent years.
- The lack of a robust law enforcement system and inadequate security measures at tourist sites and accommodations are significant concerns.
- **Inadequate Marketing and Promotion:** Efforts India's tourism industry suffers from a lack of effective marketing and promotion efforts.
- The government's promotion campaigns are often limited to cultural and heritage tourism and overlook other potential tourist attractions such as adventure tourism, medical tourism, and eco-tourism.
- Additionally, the industry lacks coordination between stakeholders, leading to fragmented marketing efforts.
- **Lack of Skilled Manpower:** Another major challenge facing the tourism sector in India is the lack of skilled manpower. The industry requires skilled professionals in various areas, including tour guiding, hospitality, and travel management.
- However, there is a significant shortage of trained professionals, which affects the quality of services provided to tourists.
- **Potential Solutions to the Challenges Facing India's Tourism Sector:**
- **Government Support:** The Indian government has taken several initiatives to promote tourism, including the Swadesh Darshan Scheme and the PRASAD Scheme.
- These schemes aim to develop tourism infrastructure and promote tourism in specific regions of the country. However, more needs to be done to address the infrastructure and safety concerns.
- **Public-Private Partnerships:** Public-private partnerships (PPPs) can play a crucial role in addressing the challenges facing India's tourism industry.
- PPPs can provide the necessary funding and expertise to develop and maintain tourism infrastructure.

- PPPs can also facilitate better coordination between stakeholders and promote innovative tourism products and services.
- Sustainable Tourism Practices: Sustainable tourism practices can address the challenges facing India's tourism industry while preserving the country's cultural and natural heritage.
- Sustainable tourism practices can help minimize the negative impact of tourism on the environment, conserve natural resources, and promote responsible tourism.
- The Indian government and the tourism industry stakeholders need to adopt sustainable tourism practices, including eco-tourism, community-based tourism, and responsible tourism, to ensure the long-term sustainability of the industry.

Conclusion

- Conclusion India's tourism industry has immense potential, but it faces several challenges that hinder its growth. The challenges facing the industry are multifaceted and require a comprehensive approach to address them.
- ✓ The government, tourism industry stakeholders, and the public need to work together to overcome the challenges facing the industry.
- ✓ The potential solutions discussed in this paper, including government support, PPPs, and sustainable tourism practices, can play a crucial role in addressing the challenges and ensuring the long-term sustainability of India's tourism industry.

MCQs

1. Graphene is frequently in news recently. What is its importance?
 1. It is a two-dimensional material and has good electrical conductivity.
 2. It is one of the thinnest but strongest materials tested so far.
 3. It is entirely made of silicon and has high optical transparency.
 4. It can be used as 'conducting electrodes' required for touch screens, LCDs and organic LEDs.
- Which of the statements given above are correct?
- a) 1 and 2 only
 - b) 3 and 4 only
 - c) 1, 2 and 4 only**
 - d) 1, 2, 3 and 4
2. With reference to the Parliament of India, which of the following Parliamentary Committees scrutinizes and reports to the House whether the powers to make regulations, rules, sub-rules, by-laws, etc. conferred by the Constitution or delegated by the Parliament are being properly exercised by the Executive within the scope of such delegation?
 - a) Committee on Government Assurances
 - b) Committee on Subordinate Legislation**
 - c) Rules Committee
 - d) Business Advisory Committee
 3. Which of the following are criteria with reference to Navratna classification in India?
 1. An average annual turnover of more than Rs. 25,000 crore during the last 3 years.
 2. An average annual net profit after tax of more than Rs. 5,000 crore during the last 3 years.

Choose the correct answer using the codes given below

- a) 1 only
 - b) 2 only
 - c) both 1 and 2**
 - d) Neither 1 nor 2
4. With reference to The Language Friendship Bridge project consider the following
 1. The Project will create a pool of experts in languages spoken in countries like Myanmar, Sri Lanka, Uzbekistan and Indonesia to facilitate better people-to-people exchanges.
 2. The project will implement by the Indian Council for Cultural Relations (ICCR) is an autonomous organisation of the Government of India under the Ministry of Culture.

Which of the above statement/s is/are not correct?

- a) 1 only
 - b) 2 only**
 - c) Both 1 and 2
 - d) Neither 1 nor 2
5. With reference to Jupiter Icy Moons Explorer Mission consider the following?

1. The Jupiter Icy Moons Explorer (JUICE) is an interplanetary spacecraft in development by the European Space Agency (ESA) with Airbus Defence and Space as the main contractor.
2. Toward the end of the mission, Juice will focus solely on orbiting Ganymede, making it the first spacecraft to ever orbit a moon in the outer solar system
3. Ganymede is the largest moon in the solar system, larger than Pluto and Mercury, and it's the only one that has a magnetic field similar to Earth.

Which of the above statement/s is/are correct?

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

6. With reference to Europa Clipper Mission often mentioned in news consider the following
 1. It is an interplanetary mission in development by NASA comprising a Lander.
 2. The spacecraft is being developed to study the Galilean moon Europa through a series of flybys while in orbit around Jupiter

Which of the above statement/s is/are correct?

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

7. Consider the following statements with regards to UN Commission On Population And Development
 1. The Commission is composed of Member States elected by the Economic and Social Council for a period of four years on the basis of geographic distribution.
 2. It met every year since its establishment.

Which of the above statement/s is/are correct?

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

8. "Good Friday Agreement" often mentioned in news is associated with which of the following countries/Organisation?

- a) USA and EU
- b) Ireland, Northern Ireland and Britain**
- c) Nordic countries and EU
- d) Sweden, Ireland and Great Britain

9. Recently Income Tax Department has notified Cost Inflation Index (CII) for current fiscal beginning, with reference to the above said Index consider the following statements

1. CII is notified under Income Tax Act, 1961 every year.
2. CII is used to arrive at inflation adjusted purchasing price of assets so as to compute taxable Long Term Capital Gain.

Which of the above statement/s is/are correct?

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

10. Consider the following statements with reference to Protection of Plant Varieties and Farmers' Rights Authority (PPV and FR)

1. It is statutory body
2. Members of Authority are appointed by Central Government
3. It promotes development of new varieties of plants and to protect the rights of farmers and breeders.

Which of the following statement/s is/are correct?

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