# TABLE OF CONTENTS

A. GS 1 Related

B. GS 2 Related

**SOCIAL JUSTICE**

1. Conversion Therapy

C. GS 3 Related

**SCIENCE AND TECHNOLOGY**

1. 5G Architecture

D. GS 4 Related

E. Editorials

**INDIAN POLITY**

1. Justice rendered, but only incompletely

**INTERNATIONAL RELATIONS**

1. India and Australia, from divergence to convergence
2. A lot is at stake for India-Bangladesh ties

F. Prelims Facts

1. Inflatable Aerodynamic Decelerator

G. Tidbits

1. Nehru Trophy

H. UPSC Prelims Practice Questions

I. UPSC Mains Practice Questions
A. GS 1 Related

Nothing here for today!!!

B. GS 2 Related

Category: SOCIAL JUSTICE

1. Conversion Therapy

*Syllabus: Welfare Schemes for Vulnerable Sections*

*Mains: Issues related to LGBTQ+

Context: Recently, the National Medical Commission (NMC) declared the conversion therapy a “professional misconduct”.

Introduction:

- NMC declared the ‘Conversion therapy a “professional misconduct’” and empowered State Medical Councils to take disciplinary action if the guideline is breached.
- This guidelines is in line with the directions of Madras High Court to issue an official notification listing conversion therapy as a wrong, under the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002.
- Pending legislation regarding the therapy, Justice N. Anand Venkatesh of Madras High Court in his June 2021 judgement, issued guidelines for the police, social welfare ministries of the State and Centre, and the medical council for the protection of the community and sought updates from stakeholders every few months.

What is ‘Conversion Therapy’:

- Members of the lesbian, gay, bisexual, transgender, queer, intersex, asexual or of any other orientation are often subjected to conversion or ‘reparative’ therapy, particularly when they are young, to change their sexual orientation or gender identity by force.
- It is done assuming homosexuality as a mental illness, even though there exists no scientific evidence. Medical textbooks prescribed in 2018 still consider lesbianism a “perversion”, an act of “mental degenerates”.
- This Therapy can mean anything from psychiatric treatment, use of psychosomatic drugs, electroshock therapy, exorcism and violence. This can lead to trauma, manifesting in depression, anxiety, drug use, and even suicide.

https://byjus.com
Way Forward:

- Laws against the practice have already been passed in several countries, including Germany, Canada, Malta, Australia, and the U.S.
- A separate legislative action is needed to outlaw the practice and legally prevent the forced administration of medication and the physical and mental abuse of the therapy.
- Administration must go forward and implement the suggestions of the Madras High Court.
- Knowledge and awareness creation to eradicate prejudices about the LGBTQ+ community must be aimed at basic education in schools and colleges.
- Changes at societal level complemented by laws is necessary to cater the needs of LGBTQ+ community and acknowledge the “variability of human beings” and accord equal respect to everyone.

Nut Graf: Derogatory practice of Conversion therapy is still practice in India even after the decriminalisation of homosexuality. Recent directions by Madras High Court and the NMC’s notice can be seen as progressive moves towards inclusivity and to make the LGBTQAI+ community feel safer.

C. GS 3 Related

Category: SCIENCE AND TECHNOLOGY

1. 5G Architecture

Syllabus: Indigenization of Technology & Developing New Technology

Mains: Roadmap for 5G deployment

Context: Government recently auctioned off 5G telecommunications spectrum drawing bids exceeding a record ₹1.5 lakh crore.

Evolution of Telecommunication technology:

- The first-generation (1G) technology involved analogue signalling
- Second Generation technology was primarily based on voice and SMS, with speeds in the Kbps range.
- 3G technology witnessed changes from voice to data transmission and added multimedia messaging with speeds in the range of 2Mbps.
- 4G let users stream and download videos at speeds three times greater than 3G ranging from around 20Mbps to up to 50Mbps.
Long Term Evolution (LTE):

- The LTE standard-based generation had two distinguished aspects from its predecessors.
- 4G-capable cell phones enabled people to make calls over the Internet instead of via telephone networks.
- 4G+ (LTE advanced) provided download speeds of 200 to 300 Mbps.
- 4G’s multiplexing capability, technically known as orthogonal frequency division multiplex (OFDM), provided a level of efficiency in achieving high data transfer rates while allowing multiple users to share a common channel.
- This enabled people use social media, download music in an app, and live-stream videos on mobile devices.
- Since 4G’s inception in the early 2010s, the number of smartphone users in the world has grown to 6.6 billion in 2022.
- For billions of smartphones and tablets along with wearables and Internet of Things (IoT) devices to work in sync with several other applications, a far superior networking and connectivity is needed and this LTE-based generation is not sufficient to handle workloads and real-time data processing of this magnitude.

Deploying 5G:

5G offers low latency, greater download speeds coupled with the ability to connect multiple devices and exchange data in real-time.

A major aspect with 5G would be the possible shift towards the Internet of Things. This could allow for the evolution of smart systems like sensor-based reading of electric metres at home and generation of electricity bills and farmers being able to monitor their crops through sensors or drones sitting at their homes.

It has a new standard called 5G New Radio (NR), which uses the best capabilities of LTE. 5G NR will enable increased energy savings for connected devices and enhance connectivity.

5G mobile communication will use high-frequency millimetre wave (mmWave) bands that operate on wavelengths between 30 GHz and 300 GHz compared to 06 GHz of 4G’s LTE.

5G has been around since the late 2010s, but it was not deployed universally mainly due to fewer 5G-compatible devices and a delayed auctioning of the spectrum.

Non-standalone Vs Standalone Architecture:

- With the majority of 4G compatible devices in the market, telecom operators and businesses looking to deploy 5G services can either build a non-standalone (NSA) or a standalone architecture.
- In an NSA architecture, the telecom operator can use their existing installed capacities and LTE architecture to deploy 5G services while implementing a new radio access network (RAN).
• This can help operators reduce capital expenditure and lower operating costs for short-to-medium term.
• Germany used the NSA model to roll out 5G services in 2019.
• The Standalone model is a pure play 5G architecture that provides operators a full range of the fifth-generation's capability and lets them slice the network.
• In this architecture, RAN and the core are completely new, and there will be a clear separation of different network functions in line with 3GPP recommendations.
• This will simplify their network operations and improve user experience. Operators may also look to leverage network slicing opportunities by creating dedicated segments for specific users and use cases.

Image Source: The Hindu

**Nut Graf:** Deployment of 5G in a standalone architecture presents an opportunity for operators to build a revenue stream. 5G could potentially make consumers connect and exchange information in a new way. The Government of India should work on overcoming infrastructure roadblocks for the timely and effective rollout of 5G.
1. Justice rendered, but only incompletely

*Syllabus: Constitution of India – features and significant provisions.*

*Mains: Provision related to bail.*

**Context:** The Supreme Court bench granted interim bail to human right activist Teesta Setalvad.

**Details of the case:**

- A Supreme Court bench led by the Chief Justice of India (CJI) granted interim bail to Teesta Setalvad, the human rights activist.
- The Court did not consider whether the appellant should be released on regular bail or not as that matter should be decided by the High Court.
- The Bench also made it clear that the present order should not be considered to be a reflection on merits and should not be used by the other accused in further case hearings.
- The judges of the Supreme Court (SC) during the hearing highlighted four concerns. They are:
  - The first concern is the omission in filing the charge sheet even after two months of the activist’s arrest
  - The other concern was regarding the First Information Report (FIR) registration on the very next day of SC’s judgment that dismissed a plea against exoneration of those accused and associated with the Gujarat 2002 riots.
  - The third issue was that even after the bail plea by the High Court, the plea was adjourned for a long time
  - Lastly, the inadequate allegations regarding the commission of any offence that was so serious to deny the bail plea.
- The concerns posed by the Court are not just valid to Ms. Setalvad’s case, but it goes much beyond them. The questions posed by the SC bench expose the malice in the State’s action to a certain extent.
- However, even after the concerns raised by the SC, there is a lack of rigour, and enthusiasm to get clear judicial solutions in the final order.
Associated concern with the SC judgment:

- The SC order was disappointing to certain degrees as SC being the guardian of the Constitution should have answered the questions posed by itself. Moreover, SC must have granted regular bail to the accused and thereby set a useful precedent for other similar cases.
- The Adjournment of regular bail applications by the High Courts for indefinitely long periods is another issue that should have been seriously addressed by SC. It should have been clearly reiterated that such indefinite delay itself calls for an appeal in the Supreme Court as per Article 136 of the Indian Constitution.
- The missed opportunity that should have been seriously taken by the Supreme Court:
  - The indefinite delays in deciding the bail plea are major concerns that further hampers the efficiency and effectiveness of the Indian judiciary. The custodial death of Father Stan Swamy and the cases of Siddique Kappan, Gautam Navlakha, and Umar Khalid have been repeatedly denied bail putting the judiciary also under trial.
  - The contention raised by the solicitor general that the activist should have waited for the High court judgment should have been rejected by the SC on the grounds of serious violation of the Fundamental Rights.
  - Supreme Court should have introspectively invoked the erroneous and unjust jurisdiction of a bench that accused the activist of keeping the pot of Gujarat riots boiling and questioning the integrity of the officials associated in the case. This judgment further hampered the release of the activist on regular bail.

Cases related to Bail:

- Gudikanti Narasimhulu case 1977, it was told that - “The issue of ‘Bail or Jail’ -at the pretrial or post-conviction stage although largely hinges on judicial discretion, it is one of justice, liberty, the burden of the public treasury and public safety. All of this insist that a developed jurisprudence of bail is integral to a socially sensitized judicial process.”
- In 1994, Joginder Kumar vs State of U.P. the above verdict was reiterated and the Court ordered procedural imperatives for arrest.
- Sanjay Chandra vs CBI case of 2011, the Court observed that the object of bail is neither punitive nor preventative and it should secure the appearance of the accused.
- The judgment in Arnesh Kumar vs State Of Bihar & Anr. (2014), relied on the Law Commission reports and the Criminal Procedure Code. It also warned against arbitrary detention and arrests.
- Moreover in the recent Satender Kumar Antil vs CBI case (2022), the highest Court observed that the ideas of democracy and the Police state are conceptually opposite to each other and urged for a Bail Act in India.

Nut Graf: Though by granting interim bail to the Social activists, justice was rendered by the Supreme court, it was incomplete. The top court should have seriously taken the matter and should have adequately intervened in the bail provisions of the country.
1. India and Australia, from divergence to convergence

**Syllabus:** Bilateral, regional and global groupings involving and affecting India’s interest.

**Prelims:** Track 1.5 dialogue between India and Australia.

**Mains:** India- Australia relations.

**Context:** Indian and Australian leaders met for the fifth round of the most important bilateral Track 1.5 dialogue in New Delhi.

**Details:**

- The India- Australia relationship is very crucial for the future of the Indo-Pacific region.
- Almost till the twentieth century, Australia and India rarely had any meaningful dialogs. The reasons were:
  - The shadow of the Cold War era.
  - Autarkic economic policies of India.
  - The White Australia policy.
  - The decision by Australia not to transfer uranium to India etc.
- The similar values and interests between the India and Australia are evident from:
  - Both the countries are English-speaking and multicultural
  - They have federal democracies having the rule of law
  - India and Australia have strategic interests and want to ensure a balance in the Indo-Pacific and further reiterating that the region should not be dominated by any particular hegemonic power.
  - Moreover, the largest source of skilled migrants in Australia is India.
  - There is also a view that the already robust economic relationship between India and Australia, could be further transformed if the new Australia-India Economic Cooperation and Trade Agreement (ECTA) is successfully realized.

**Significance of India- Australia dialogue:**

- The Leadership Dialogue between the two countries is important because ideas matter in a relationship as much as negotiations and transactions.
  - The dialogue is defined as a conversation between co-equals who have agreed to work as partners.
- Strong, stable, and sustainable relationships are not just based on potential gains but are equally
built on future promise. In other words, forums like these can provide the space and the ambience to infuse new ideas and generate new energy in the relations.

- It is believed that dialogue provides the power of personal and collective communication in a shared physical space. It is ultimately the people and real connections that matter the most, contrary to the cyber world.
- Moreover, this is the first Dialogue post-pandemic. It was not held since 2019 and has kept both countries apart.

**Areas of Co-operation:**

- The areas of cooperation where both the countries face shared challenges are:
  - Artificial intelligence (AI) and cyber threats
  - Geopolitically turbulent region of Indo-Pacific
  - Measures to decarbonize economies
  - Helping each other to develop robust supply chains through cooperation in the field of critical minerals
  - The cooperation in the field of Human resources, where the Indian diaspora can help in addressing Australia’s skills gaps.
  - The use of emerging technology is another area that is high on the agenda.
- Moreover, Australia wants to find an alternative Chinese market and diversify the supply chains for its critical minerals. As a country with reserves of almost 21 out of the total 49 minerals identified in India’s critical minerals strategy, Australia is perfectly placed to serve the needs of India. It is all the more essential in the present scenario for India’s carbon reduction target.
- It will also be significant for the regional security aspect.
- The relations will promote commercial and business opportunities. It also has the potential to strengthen people-to-people ties.

**Nut Graf:** *As India surpasses the United Kingdom as the fifth largest economy, India- Australia relations can provide further impetus to the Indian economy. The leaders of both countries should recommend more concrete steps to strengthen the relationship and create a more habitable, peaceful, and sustainable planet.*

**2. A lot is at stake for India-Bangladesh ties**

**Syllabus:** India and its neighborhood relations.

**Mains:** India- Bangladesh relations.

**Context:** Bangladesh Prime Minister's visit to India.
Details of India- Bangladesh Relations:

- Bangladesh is the sixth largest trade partner of India with a bilateral trade value of approximately Ten billion dollars in 2020-21. Bangladesh imports crucial industrial raw materials from India.
- The two neighbouring countries expanded their partnerships including areas like cybersecurity, Artificial Intelligence, startups, connectivity, and fintech. This was the result of the seventh round of the India-Bangladesh Joint Consultative Commission that was concluded in June 2022.
- Trade will be the major area of discussion during Bangladesh Prime Minister’s visit to India. This is because the two countries are about to sign a Comprehensive Economic Partnership Agreement (CEPA).
  - CEPA comes at the moment when Bangladesh is about to lose various benefits like quota-free and duty-free market-access facilities in India. This is because Bangladesh will become a developing country after 2026.
  - As per the World Bank, Bangladesh’s exports can rise to nearly 182% under the ambit of the free trade agreement (FTA).
  - This could even reach 300% with the provision of reduced transaction costs and trade facilitation measures.
  - Bangladesh can also improve its manufacturing industries with the help of Indian expertise.
- The leaders of India and Bangladesh will also inaugurate a joint venture power plant in the near future.
- Presently, international bus services and three express trains operate between the two countries.
- India and Bangladesh are also expected to cooperate on one of the major rivers.

Significance of India- Bangladesh relations:

- Both countries have implemented several projects in the past to boost the connectivity between eastern India and Bangladesh. It will further help in boosting India’s economic growth.
- India is also expecting that Bangladesh should divert its exports using the Indian ports in place of Singaporean or Malaysian counterparts.

Causes of concern:

- The Teesta river sharing has remained a contentious issue between the two nations since 1947. As in the case of India, Teesta is important for the state of West Bengal where it sustains an impoverished farming district comprising nearly 12.77% of its population. And the Teesta’s flood plains are also crucial for Bangladesh as it covers around 14% of the total cropped area of the nation and provides direct livelihood to nearly 7.3% population.
- The rising prominence of China in Bangladesh is a major cause of worry for India. Bangladesh had approached China for a mega project to enhance the Teesta river water flow. China is also supporting Bangladesh in solving the Rohingya refugee crisis. Moreover, Bangladesh is the
second largest arms market for China (after Pakistan).

- Bangladesh is also trying to warm up with Pakistan after decades-long frosty relations.
- There was also concern regarding, the NRC and the Citizenship Amendment Act.
- The killings in the border region are also a serious issue that often disturbs the relationship between the two countries.
- There is also a perceived nation in Bangladesh that India is aligned to one particular political ideology.

**Nut Graf:** *Even though India maintains goodwill with Bangladesh, it is important that the concerns between the two nations are addressed on an urgent basis. The population of Bangladesh is equally sensitive to being treated with respect and fairness.*

---

**F. Prelims Facts**

**1. Inflatable Aerodynamic Decelerator**

**Syllabus: Indigenization of Technology & Developing New Technology**

**Prelims: Missions by ISRO**

**Context:** Recently, The Indian Space Research Organisation (ISRO) successfully tested the Inflatable Aerodynamic Decelerator (IAD).

**Details:**

- IAD is a technology that could aid cost-effective recovery of spent rocket stages and safely land payloads on other planets.
- It serves to decelerate an object plunging down through the atmosphere by systematically reducing the velocity of the payload through aerodynamic drag.
- Once the IAD fell into the sea, it deflated by firing a deflation pyro valve. The pneumatic system used for inflating the IAD was developed by the Liquid Propulsion Systems Centre (LPSC), Valiyamala.
- It was designed, developed and successfully test-flown by ISRO’s Vikram Sarabhai Space Centre on a Rohini-300 (RH300 Mk II) sounding rocket from the Thumba Equatorial Rocket Launching Station (TERLS).
- It has multiple applications in ISRO’s future missions including its missions to Venus and Mars.
- Rohini sounding rockets are routinely used for flight demonstration of new technologies being developed by ISRO as well as by scientists from India and abroad.
1. Nehru Trophy

- The Nehru Trophy Boat Race is a popular Vallam Kali held in the Punnamada Lake near Alappuzha, Kerala, India.
- Vallam Kali or Vallamkali literally means boat play/game, but can be translated to boat race in English.
- The most popular event of the race is the competition of ChundanVallams (snake boats). Hence the race is also known as the Snake Boat Race in English.
- This Boat race was inaugurated in 1952 by Prime Minister Jawaharlal Nehru. The winner was awarded a trophy in the name of Jawaharlal Nehru.
- In 2019, it was also made a part of the newly constituted CBL - Champions Boat Leagues.

H. UPSC Prelims Practice Questions

Q1. How many of the given statements is/are INCORRECT? (Level-Medium)

1. The Himalayan Chandra Telescope is located at Hanle in Ladakh.
2. The High Energy Gamma Ray telescope is located at Hanle in Ladakh.
3. India’s biggest and second dark sky reserve will come up at Hanle in Ladakh.

Options:

a) One statement only  
b) Two Statements only  
c) All three statements  
d) None of the above

Answer: a

Explanation:

- **Statement 01 is correct**, Himalayan Chandra Telescope is a 2-m diameter optical-infrared Telescope at the Indian Astronomical Observatory (IAO), Mt. Saraswati, Hanle, Ladakh
  - It is located at an altitude of 4500 m above mean sea level.
  - It is operated by the Indian Institute of Astrophysics (IIA), Bangalore.

- **Statement 02 is correct**, The Major Atmospheric Cherenkov Experiment Telescope (MACE) is India’s largest and the world’s highest gamma-ray telescope in Hanle, Ladakh.

- **Statement 03 is incorrect**, The Union ministry of Science and Technology has undertaken to
set up India’s first-ever Night Sky Sanctuary in Ladakh.

- The proposed Dark Sky Reserve will be located at Hanle in Ladakh as a part of Changthang Wildlife Sanctuary.

Q2. The temple was built by the Karkota dynasty king Lalitaditya Muktapida. It is dedicated to Lord Surya and has definite Gandhara influences. Rajatarangini written by Kalhana has descriptions of the grandeur of this temple. The temple being described is: (Level-Difficult)

   a) Konark Sun Temple
   b) Navalkha Temple
   c) Martand Sun temple
   d) Suryanar Kovil

Answer: c

Explanation:

- Martand Sun temple is a 8th century temple recognised as a “Site of national importance” by Archaeological Survey of India located in Jammu and Kashmir.
- According to Kalhana in his Rajatarangini, the Martand Sun Temple was commissioned by Lalitaditya Muktapida of Karkota dynasty dedicated to Lord Shiva.
- It was an excellent specimen of Kashmiri architecture, which had blended the Gandharan, Gupta and Chinese forms of architecture.
- It was destroyed during the rule of Sikandar Shah Miri between 1389 and 1413.
Q3. How many of the given statements with respect to “New Fund Offer (NFO)” is/are Correct? (Level-Medium)

1. NFO is the first-time subscription offer for a new scheme launched by the asset management companies (AMCs).
2. Objective of the NFOs is to provide last-mile funding for stalled affordable and middle-income housing projects across the country.
3. NFOs are launched in the market to raise capital.

Options:

a) One statement only
b) Two statements only
c) All three statements
d) None of the above

Answer: b

Explanation:

- A new fund offer (NFO) is the first time subscription offer for a new scheme launched by the asset management companies (AMCs).
- It is launched in the market to raise capital from the public in order to buy securities like shares, govt. bonds etc. from the market.
- It is similar to the initial public offer (IPO) with an attempt to raise capital from the market.
- NFOs are offered for a stipulated period.

Q4. “Kurki” - recently seen in the news refers to: (Level - Medium)

a) A system used to monitor migrant laborers, working primarily in the construction and domestic sectors in Gulf Cooperation Council member states and a few neighboring countries.
b) The common systematic law on administrative procedure adopted by governments of Kyrgyzstan, Turkmenistan and Uzbekistan.
c) An informal and illegal method of transferring money without any physical money actually moving.
d) The attachment of a farmer’s land, already pledged to the money lending institution or individual, in case of a loan default.

Answer: d

Explanation:

- Kurki means attachment of a farmer’s land, already pledged to the money lending institution or
individual, in case of a loan default.

- Apart from banks, private moneylenders, commission agents also get these decrees against farmers from time to time.
- Kurki orders are executed under Section 60 of Civil Procedure Code, 1908.

Q5. In the context of the history of India, consider the following pairs: (Level-Difficult)(CSE Prelims-2016)

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eripatti</td>
<td>Land revenue from which was set apart for the maintenance of the village tank</td>
</tr>
<tr>
<td>Taniyurs</td>
<td>Villages donated to a single Brahmin or a group of Brahmins</td>
</tr>
<tr>
<td>Ghatikas</td>
<td>Colleges generally attached to the temples</td>
</tr>
</tbody>
</table>

Which of the pairs given above is/are correctly matched?

a) 1 and 2
b) 3 only
c) 2 and 3
d) 1 and 3

Answer: d

Explanation:

- **Pair 01 is correctly matched,** Eripatti was Tank lands i.e land donated by individuals, the revenue from which was set apart for the maintenance of the village tank.
- **Pair 02 is incorrectly matched,** Taniyurs was a large village and were distinct revenue units under Cholas. Villages donated to a single Brahmin or a group of Brahmins were called Brahmadeya.
- **Pair 03 is correctly matched,** A Ghatika was a center of learning including religion smaller in size compared to Agrahara. Ghatikas were institutions mostly attached to temples.

I. UPSC Mains Practice Questions

1. Relations with Bangladesh still remain the brightest spot in India’s neighbourhood diplomacy. Elucidate. (250 words; 15 marks) (GS-2; International relations)
2. Assess the progress made by the Government of India in ensuring rights to the LGBTQI+ community since Independence. (250 words; 15 marks) (GS-2; Social Justice)