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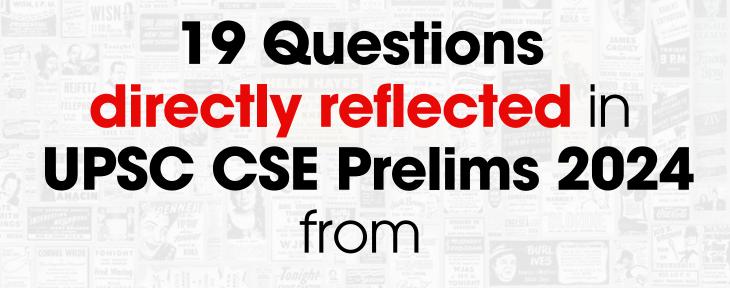
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May 2024 (IN-DEPTH)

CURRENT AFFAIRS MONTHLY



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NEW TIME

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separate trading platforms for debts. Which of the statements given above is/are

3. In India, Stock Exchanges can offer

correct?

1 and 2 only

(G-Secs).

3 only

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SUM, 4:30 STATION WOR

- 1, 2 and 3
- 2 and 3 only

2) G-Secs

About G-Secs

- A Government Security (G-Sec) is a tradable instrument issued by the Central Government or the State Governments. acknowledges the Government's debt obligation.
- Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more).
- In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs).
- G-Secs carry practically no risk of default and, hence, are called riskfree gilt-edged instruments.
- The limits for Foreign Portfolio Investment (FPI) investment in G-secs and SDLs are 6% and 2% respectively.

July- 2023 Digest

NEW TIME

- 70. The North Eastern Council (NEC) was established by the North Eastern Council Act, 1971. Subsequent to the amendment of NEC Act in 2002, the Council comprises which of the following members?
 - 1. Governor of the Constituent State
 - Chief Minister of the Constituent State
 - 3. Three Members to be nominated by the President of India
 - 4. The Home Minister of India

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 1, 3 and 4 only
- (c) 2 and 4 only
- (d) 1, 2, 3 and 4

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Related Information North Eastern Council

- The North Eastern Council is the nodal agency for the economic and social development of the North Eastern Region which consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- It is a statutory organization established under the North Eastern Council Act, 1971 at Shillong, Meghalaya.
- Initially, NEC was an Advisory Body for the North Eastern Region. Now NEC is mandated to function as a Regional Planning Body for the North Eastern Region.
- The Council comprises Governors and Chief Ministers of constituent States and three members nominated by the President.



NEW TIME

- 50. With reference to Corporate Social Responsibility (CSR) rules in India, consider the following statements:
 - CSR rules specify that expenditures that benefit the company directly or its employees will not be considered as CSR activities.
 - CSR rules do not specify minimum spending on CSR activities.

Which of the statements given above is/are correct?

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

CSR in India

- India is the first country in the world to make CSR mandatory, following an amendment to The Company Act, 2013 in 2014.
- Any company that has a net worth
 of at least Rs 500 crore, a
 turnover of Rs 1,000 crore or a
 net profit of Rs 5 crore is obliged
 to spend 2% of its average profits
 over the last three years on CSR.
- Businesses can invest their profits in areas such as education, poverty, gender equality, and hunger as part of their CSR compliance, as regulated by the law.

September- 2023 Digest

- 65. Consider the following properties included in the World Heritage List released by UNESCO:
 - 1. Shantiniketan
 - 2. Rani-ki-Vav
 - Sacred Ensembles of the Hoysalas
 - 4. Mahabodhi Temple Complex at
 - Bodhgaya

How many of the above properties were included in 2023?

WILLIE PIPER

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

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Why in News?

 The number of UNESCO World Heritage Sites in India has grown to 42 with the Santiniketan and 'Sacred Ensembles of the Hoysala' finding a place in the coveted list.

NEW TIME

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About Shantiniketan

- Santiniketan, located in West Bengal, is a renowned cultural and educational center with historical and literary significance.
- Santiniketan was founded by renowned poet and philosopher Rabindranath Tagore in 1901. The name "Santiniketan" translates to "Abode of Peace."
- Santiniketan is home to Visva
 Bharati University, an
 internationally renowned
 institution that Tagore established
 in 1921. Visva Bharati embodies
 the ideals of Rabindranath Tagore,
 promoting a blend of traditional
 Indian education with the best of
 Western and international ideas.
- Santiniketan has played a pivotal role in the **Indian cultural** and



- Consider the following statements regarding 81. 'Nari Shakti Vandan Adhiniyam':
 - Provisions will come into effect from the 18th Lok Sabha.
 - This will be in force for 15 years after 2. becoming an Act.
 - There are provisions for the reservation of seats for Scheduled Castes Women within the quota reserved for the Scheduled Castes.

Which of the statements given above are correct?

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- 1, 2 and 3 (a)
- 1 and 2 only
- 2 and 3 only
- 1 and 3 only

Highlights of the Bill

Reservation Percentage: The bill proposes to reserve one-third of all seats for women in Lok Sabha, state legislative assemblies, and the Legislative Assembly of the National Capital Territory of Delhi.

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- Horizontal Reservation: One third of the total number of seats reserved for Scheduled Castes and Scheduled Tribes shall reserved for women of those groups in the Lok Sabha and the legislative assemblies. allocation of reserved seats shall be determined by such authority as prescribed by Parliament.
- Commencement of Reservation: The reservation will be effective once the census conducted after the commencement of this Bill has been published. Based on the census. delimitation will be undertaken to reserve seats for women.
- Seats on Rotational Basis: The seats reserved for women will be allotted by rotation to different constituencies in the state or union territory after each delimitation exercise.
- Duration of Reservation: The reservation will be provided for a period of 15 years. However, it shall continue till such date as



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- 80. Which of the following statements about the Ethics Committee in the Lok Sabha are correct?
 - Initially it was an ad-hoc Committee.
 - Only a Member of the Lok Sabha can make a complaint relating to unethical conduct of a member of the Lok Sabha.
 - This Committee cannot take up any matter which is sub-judice.

Select the answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only

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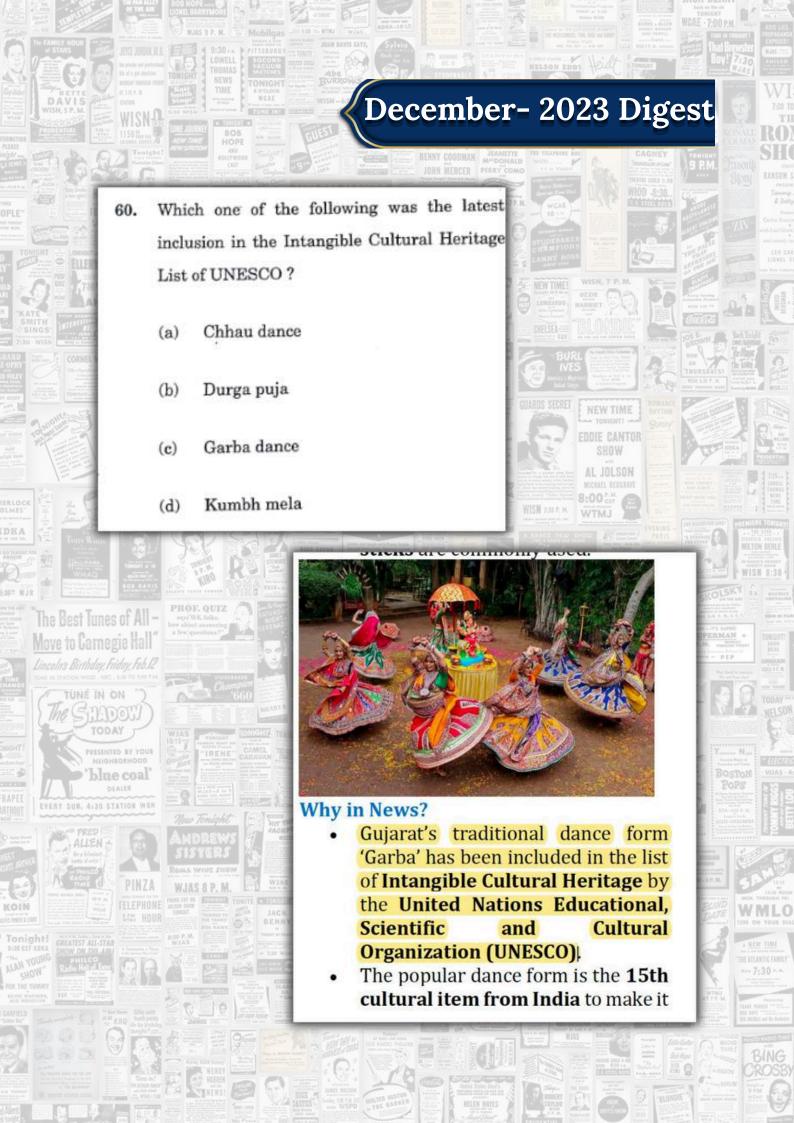
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 The late Speaker, G M C Balayogi, constituted an ad hoc Ethics Committee in 2000, which became a permanent part of the House only in 2015.

NEW TIME

How does the Ethics Committee function?

- The ethics committee oversees the moral and ethical conduct of members and examines cases of 'unethical conduct' referred to it.
- The Committee examines complaints filed against members of the House by other members; outsiders through a member; or referred by the Speaker.
- The Committee does not entertain complaints based only on media reports or on matters that are sub judice.
- The Committee makes a prima facie inquiry before deciding to examine a complaint and presents its report to the Speaker, who places it before the House for consideration.





- 3. Consider the following:
 - 1. Pyroclastic debris
 - 2. Ash and dust
 - Nitrogen compounds
 - Sulphur compounds

How many of the above are products of volcanic eruptions?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four
 - Natural sources for the emission of Sulphur dioxides include volcanic eruptions, forest fires, etc.
- SO2 emissions can cause respiratory, cardiovascular and lung diseases and can induce acid rain, which is a threat to crops, forests, and aquatic species.

March-2024 Digest

87. Consider the following pairs:

	Country	Reason for being in the news
1.	Argentina	Worst economic crisis
2.	Sudan .	War between the country's regular army and paramilitary forces
3.	Turkey	Rescinded its membership of NATO

How many of the pairs given above are correctly matched?

- (a) Only one pair
- (b) Only two pairs
- (c) All three pairs
- (d) None of the pairs

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- At present, NATO has 31 members.
 In 1949, there were 12 founding
 members of the Alliance: Belgium,
 Canada, Denmark, France, Iceland,
 Italy, Luxembourg, the Netherlands,
 Norway, Portugal, the United
 Kingdom and the United States.
- The other member countries are: Greece and Turkey (1952), Germany (1955), Spain (1982), the

March- 2024 Digest

NEW TIME

84. Consider the following statements:

- It is the Governor of the State who recognizes and declares any community of that State as a Scheduled Tribe.
- A community declared as a Scheduled Tribe in a State need not be so in another State.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

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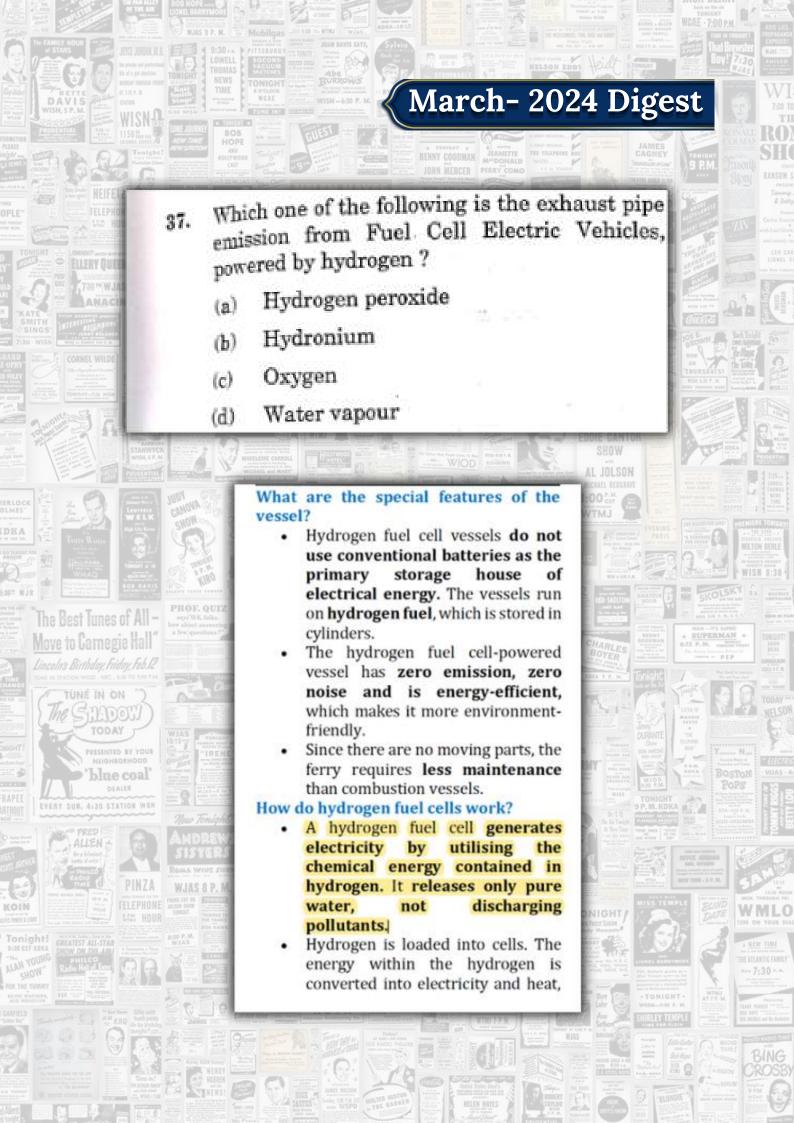
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- (c) Both 1 and 2
- (d) Neither 1 nor 2

1) Criteria for scheduling of tribes Who are Scheduled Tribes?

- The framers of the Constitution took note of the fact that certain communities in the country were suffering from extreme social, educational and economic backwardness on account of the primitive agricultural practices, lack of infrastructure facilities and geographical isolation.
- The Constitution of India in Article 366 (25) prescribes that the Scheduled Tribes means such tribes or tribal communities as are deemed under Article 342 of the Constitution to be Scheduled Tribes.
- Essentially, the President is the sole authority to notify tribal communities as Scheduled Tribes as per the Constitution of India, with the Governor playing a recommendatory role.



April- 2024 Digest

- 72. The Constitution (71st Amendment) Act, 1992 amends the Eighth Schedule to the Constitution to include which of the following languages?
 - 1. Konkani
 - 2. Manipuri
 - Nepali
 - Maithili

Select the correct answer using the code given below:

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4

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List of languages in the Eighth Schedule

- The Eighth Schedule to the Constitution consists of the following 22 languages:-
 - (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.
- Of these languages, 14 were initially included in the Constitution. Sindhi language was added in 1967. Thereafter three more languages viz., Konkani, Manipuri and Nepali were included in 1992. Subsequently Bodo, Dogri, Maithili and Santhali were added in 2004.

April- 2024 Digest

NEW TIME

SHOW

- 17. With reference to perfluoroalkyl and polyfluoroalkyl substances (PFAS) that are used in making many consumer products, consider the following statements:
 - PFAS are found to be widespread in drinking water, food and food packaging materials.
 - PFAS are not easily degraded in the environment.
 - Persistent exposure to PFAS can lead to bioaccumulation in animal bodies.

Which of the statements given above are correct?

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

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SUM, 4:30 STATION WOR

9) Forever chemicals

About

- Perand polyfluoroalkyl substances (PFAS), known as "forever chemicals", are a large, synthetic complex group of chemicals that have been used in consumer products (such nonstick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, firefighting forms, etc.) around the world.
 - PFAs can migrate to the soil, water and air during their production and use. Since most PFAs do not break down, they remain in the environment for long periods of time.
 - Some of these PFAs can build up in people and animals if they are repeatedly exposed to the chemicals.



- 43. In India, which of the following can trade in Corporate Bonds and Government Securities?
 - 1. Insurance Companies
 - Pension Funds
 - 3. Retail Investors

Select the correct answer using the code given below:

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

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EVERY SUM, 4:30 STATION WOR

1) RBI Retail Direct Scheme

What is RBI Retail Direct Scheme?

- Introduced in 2021, the Retail Direct scheme is a one-stop solution to facilitate investment in Government Securities by individual investors.
- Under this scheme, individual retail investors can open a Gilt Securities Account - "Retail Direct Gilt (RDG)" Account with the RBI.

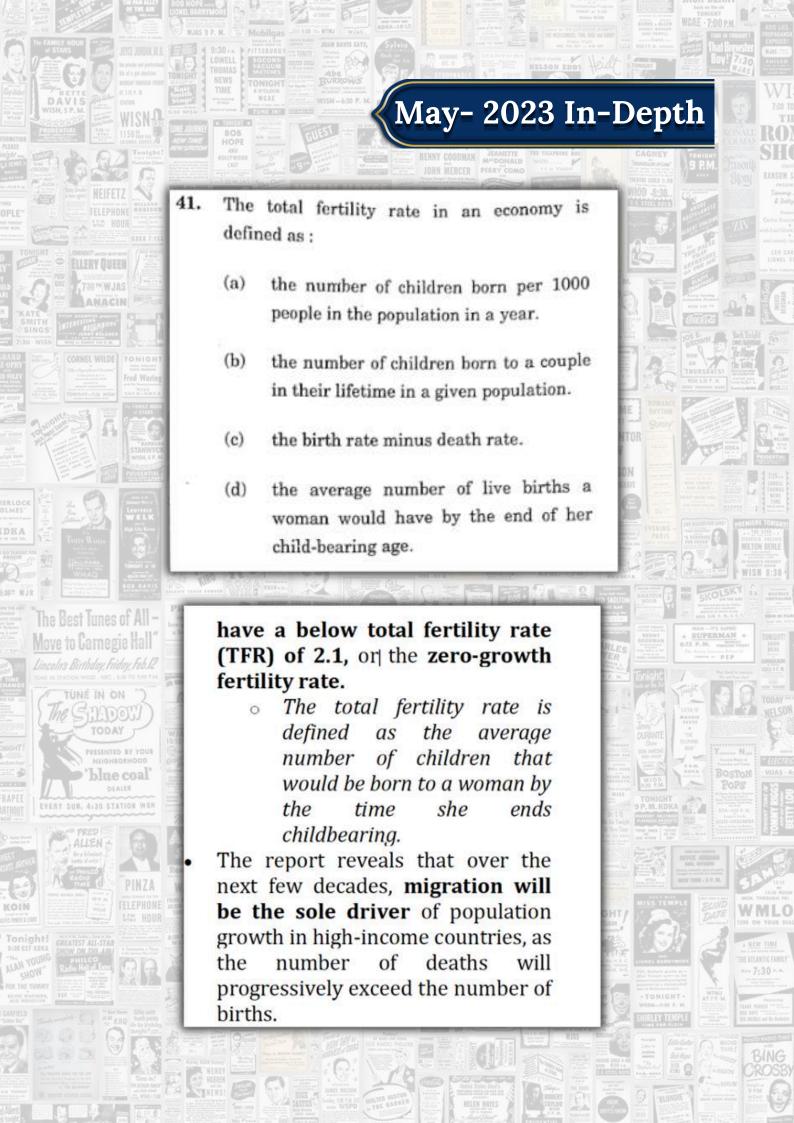
Who can open a Retail Direct Gilt Account?

- Retail investors, that is, individuals (natural persons) are allowed to open an RDG account. The following are required to open an account:
 - Rupee savings bank account maintained in India;

NEW TIME

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- Permanent Account Number (PAN) issued by the Income Tax Department;
- Any Officially Valid Document (OVD) for KYC purpose;
- Valid email id; and
- Registered mobile number.





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92. Consider the following statements:

Statement-I:

India does not import apples from the United States of America.

Statement-II:

In India, the law prohibits the import of Genetically Modified food without the approval of the competent authority.

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

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

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SUM, 4:30 STATION WOR

- In India, Genetically modified organisms and products are regulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) under the provisions of the Environment (Protection) Act, 1986.
- The Genetic Engineering Appraisal Committee under MoEFCC is authorized to review, monitor and approve, import, export, transport, manufacture, use or sell GMO.
- GEAC's approval does not mean commercial cultivation, the final decision to allow commercial cultivation is taken by the MoEFCC.



91. Consider the following statements:

Statement-I:

There is instability and worsening security situation in the Sahel region.

Statement-II:

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SUM, 4:30 STATION WOR

There have been military takeovers/coups d'état in several countries of the Sahel region in the recent past.

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

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Challenges and disruptors in Africa

 Existential challenges: Africa in general, Sahel region in particular, are passing through several existential challenges such as misgovernance, unplanned development, the dominance of ruling tribes and corruption.

NEW TIME

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- New challenges: Recently, new disruptors such as the Islamic terror, inter-tribal scrimmage, changing climate, runaway food inflation, urbanization and youth unemployment are major challenges.
- Past military interventions: Past military interventions by France, the US and Russia's Wagner Group along with curbing the militancy, keeps dictatorships in power to protect their economic interests, such as uranium in Niger, gold in Central African Republic and oil in Libya.



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- 99. With reference to the 'Pradhan Mantri Surakshit Matritva Abhiyan', consider the following statements:
 - This scheme guarantees a minimum package of antenatal care services to women in their second and third trimesters of pregnancy and six months post-delivery health care service in any government health facility.
 - Under this scheme, private sector health care providers of certain specialities can volunteer to provide services at nearby government health facilities.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

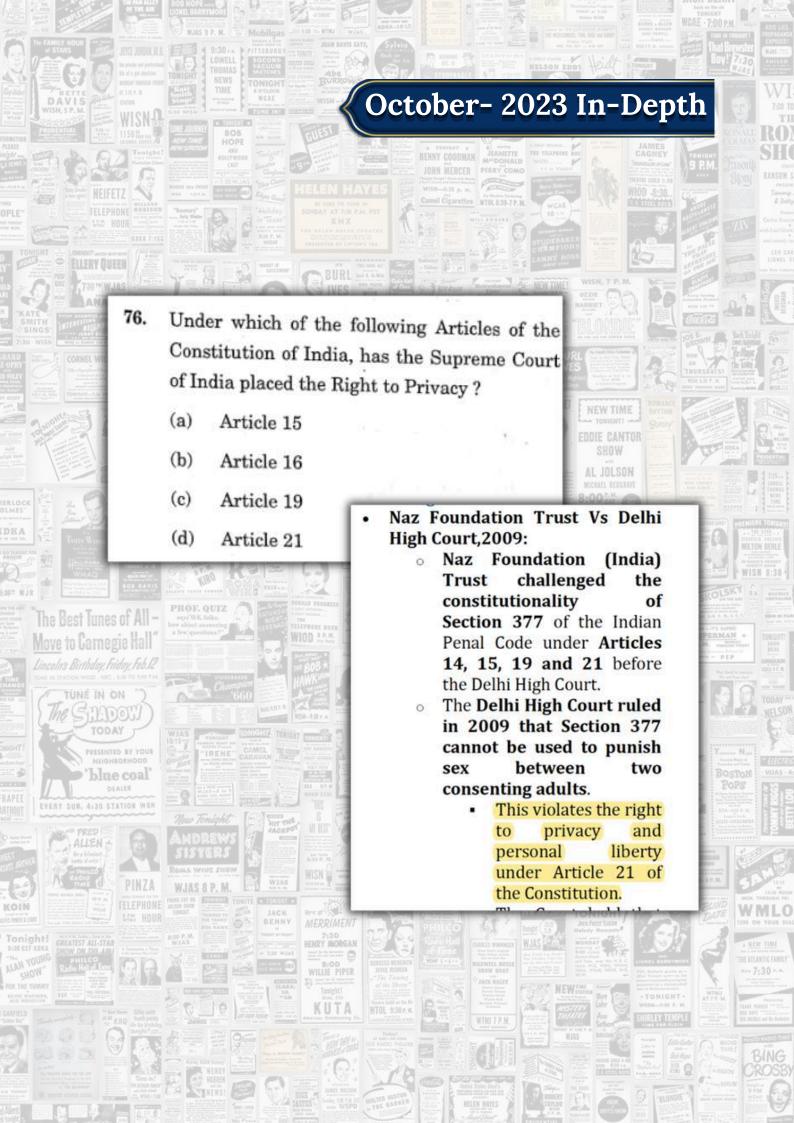
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- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 4. Pradhan Mantri Surakshit Matritva Abhiyan:
 - PMSMA under the Ministry of Health & Family Welfare aims at providing assured, cost-free, comprehensive, and quality antenatal care to all pregnant women on the 9th day of every month and guarantees a minimum package of antenatal care services to women in their 2nd/3rd trimesters of pregnancy.

5. Janani Shishu Suraksha Karyakram:

- JSSK, launched in 2011, aims to achieve 100% institutional delivery and elimination of out of pocket expenditure for both pregnant women and the sick neonates.
- Pregnant women are also entitled to free of cost facilities such as cashless-delivery/caesarean section, drugs/consumables,



20 Questions directly reflected in UPSC CSE Prelims 2024 from



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FOR PRELIMS 2024



Mr.Guna Mathivanan Head, R&D

Faculty - Current Affairs / Economy

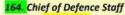
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What are the duties of the Chief of Defence Staff (CDS) as Head of the Department of Military Affairs?

- Permanent Chairman of Chiefs of Staff Committee
- Exercise military command over the 2. three Service Chiefs
- Principal Military Advisor to Defence Minister on all tri-service matters

Select the correct answer using the code given below:



- In the Kargil War, poor coordination was experienced between Indian Army and IAF
- The first proposal for a Chief of Defence Staff (CDS) came from the 2000 Kargil Review Committee (KRC)
- A group of ministers that was formed in 2001 to explore necessary reforms required to improve India's national security had also favoured creating the post of Chief of Defence Staff.

NEW TIME

- In 2012 Naresh Chandra task force recommended the appointment of a permanent chairman of chiefs of staff committee
- The CDS is also one of the recommendations made by the Lt. General D.B. Shekatkar (retd.) committee (2016).



Taking these recommendations into consideration, the government appointed General Bipin Rawat India's first Chief of Defence Staff in 2019





PROF. QUIZ

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- CDS is a four-star officer and acts as the singlepoint principal military adviser to the Defence Minister on all tri services matters.
- In addition to heading the Department of Military Affairs (DMA), the CDS also acts as the permanent chairman of the Chiefs of Staff Committee.
- The three service chiefs are members of the Chiefs of Staff Committee.
- However, CDS do not exercise any military command including over three service chiefs.
- Also, the three service chiefs advise the Defence Minister, as done so far, on matters exclusively concerning their respective services.











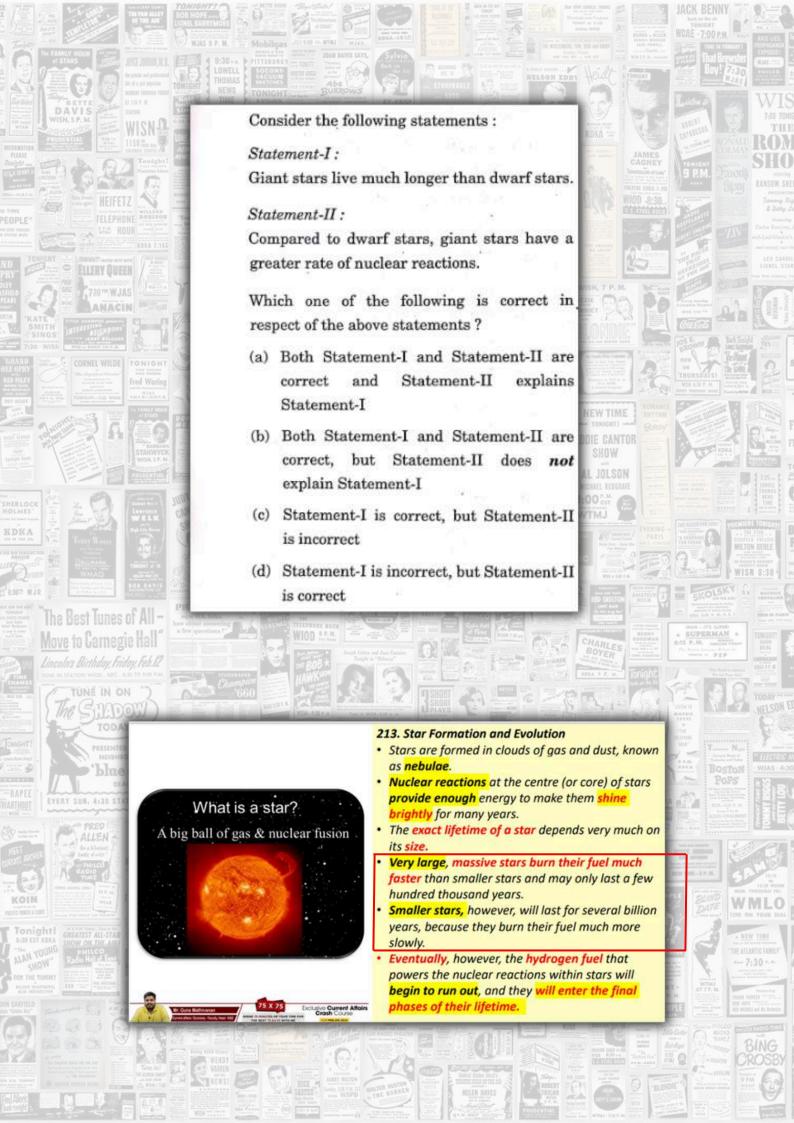


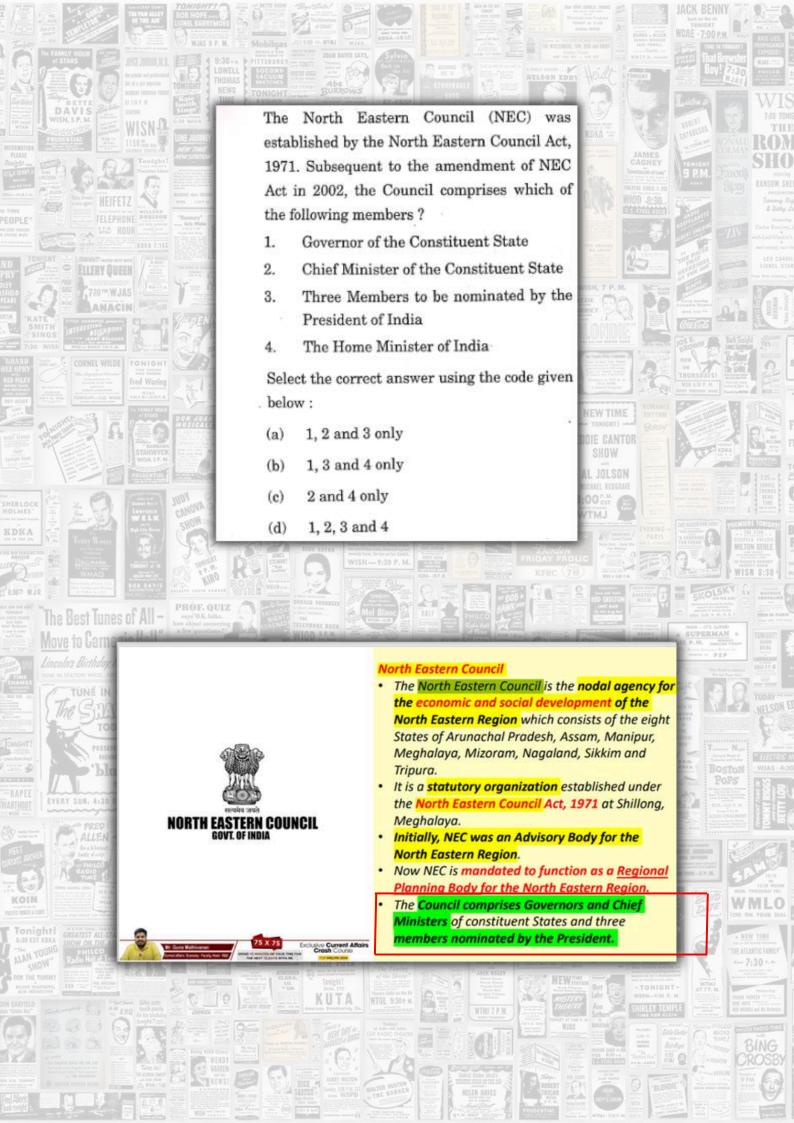


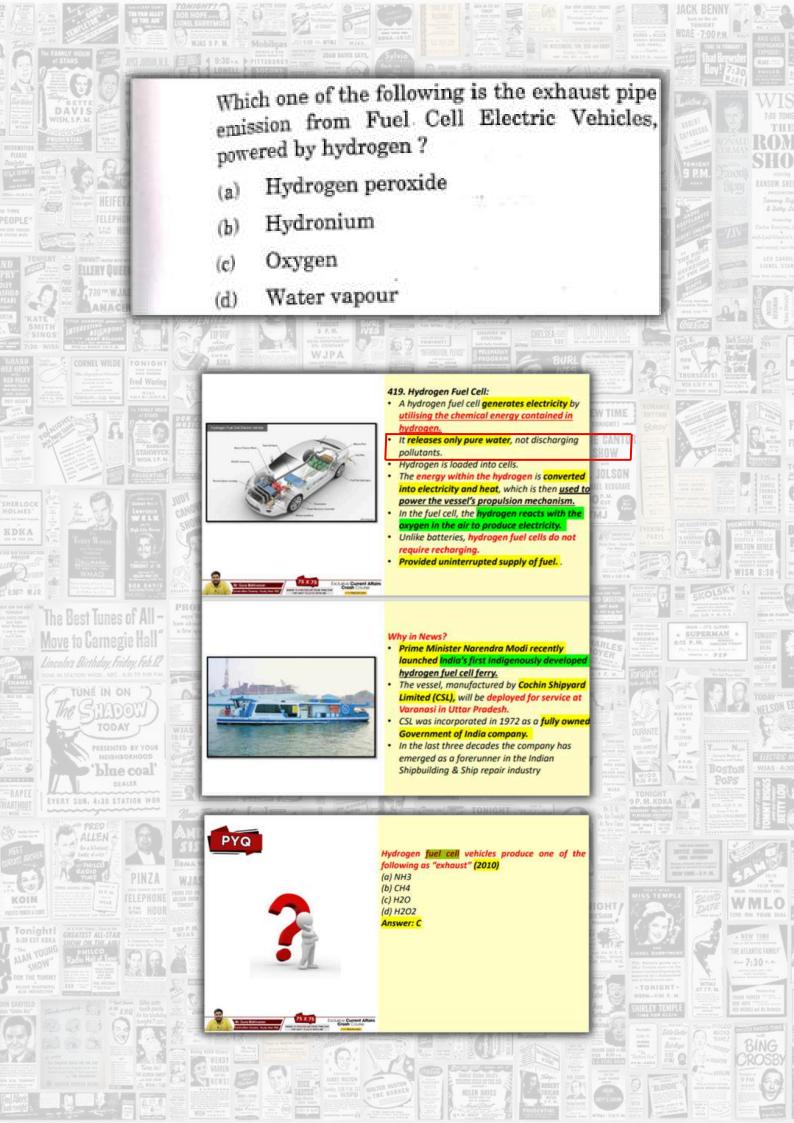


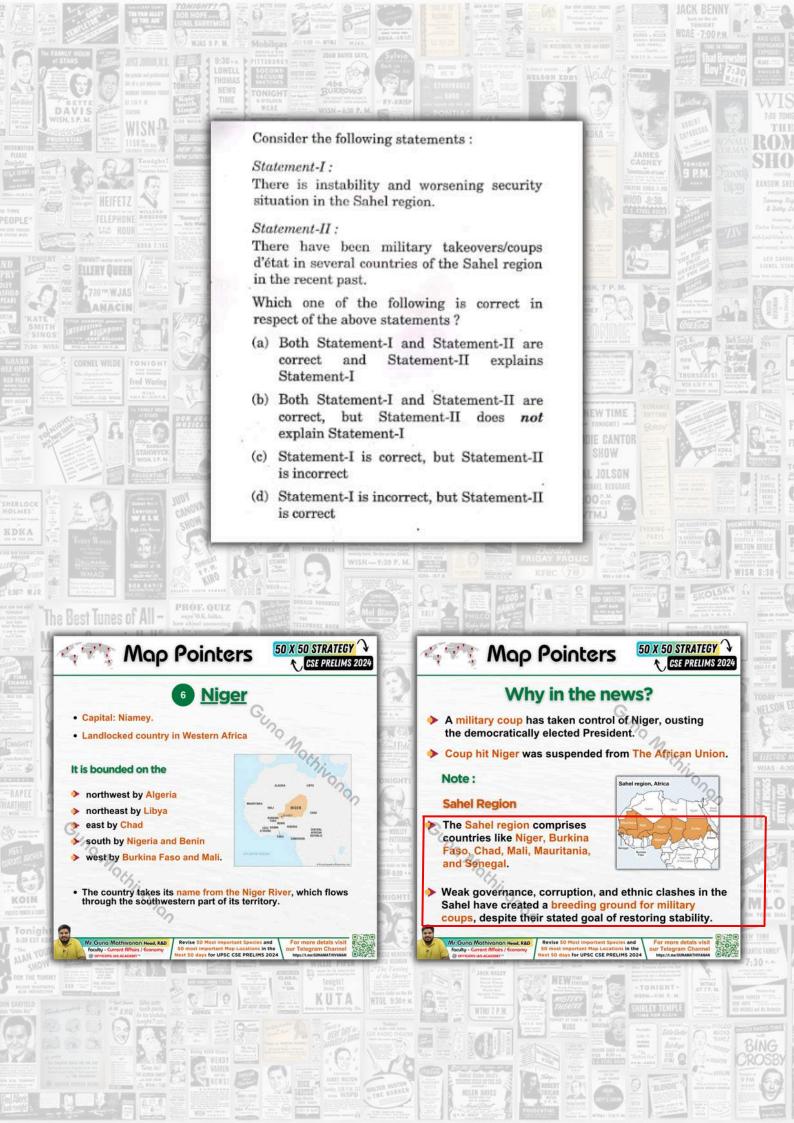














- 1. Finland
- 2. Germany
- Norway
- 4. Russia

How many of the above countries have a border with the North Sea?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Map Pointers

50 X 50 STRATEGY CSE PRELIMS 2024

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 It is the northeastern arm of the Atlantic Ocean, located between the British Isles and the mainland of northwestern Europe.

The sea is bordered by

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- the island of Great Britain to the southwest and west,
- the Orkney and Shetland islands to the northwest,
- Norway to the northeast,
- > Denmark to the east,
- Germany and the Netherlands to the southeast, and
- > Belgium and France to the south.



. It is connected to the Atlantic by the Strait of Dover.

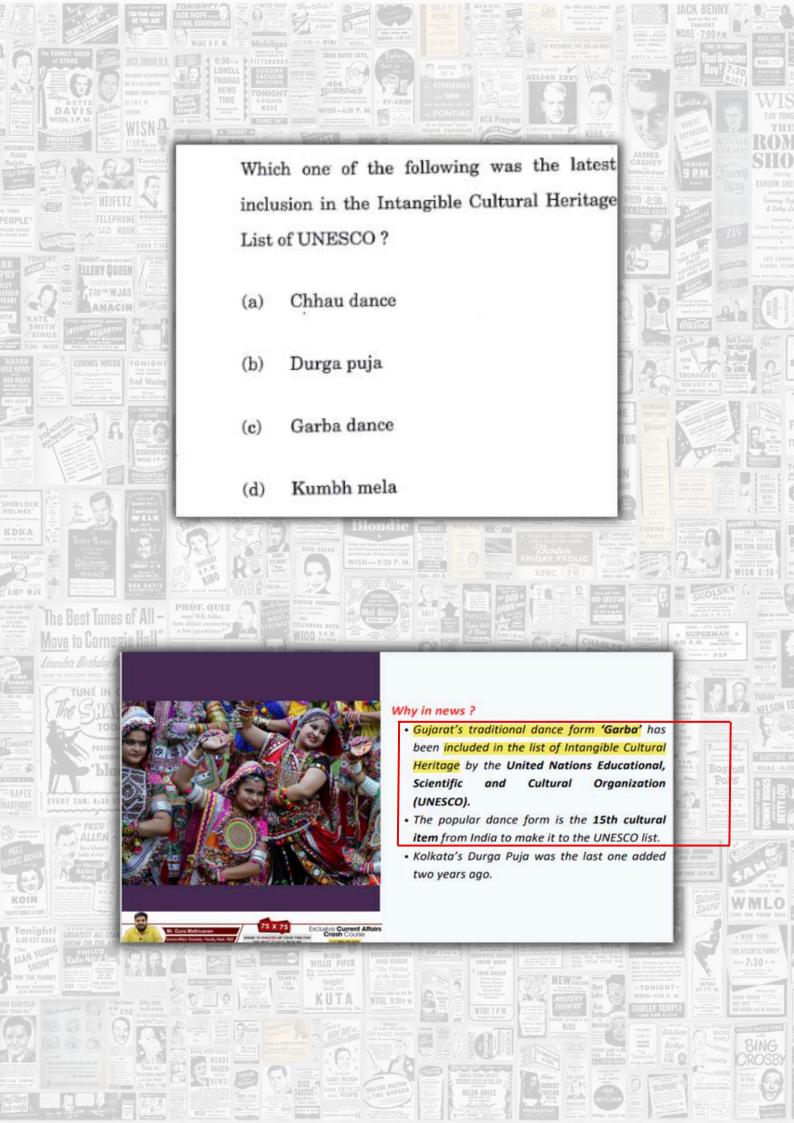
Mr. Guna Mathivanan Heed, R&D faculty - Current Affairs / Economy @ OFFICERS IAS ACADEMY**

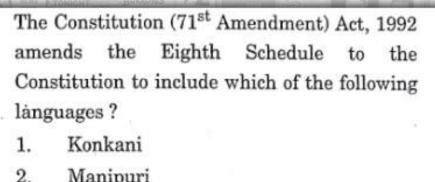
SO most important Species and 50 most important Map Locations in the Next 50 days for UPSC CSE PRELIMS 2024

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- Manipuri
- Nepali 3.
- Maithili

Select the correct answer using the code given below:

- (a) 1, 2 and 3
- 1, 2 and 4 (b)
- 1, 3 and 4 (c)
- 2, 3 and 4 (d)

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50. Eighth Schedule of Indian Constitution

Constitutional provisions relating to Eighth Schedule

- The Constitutional provisions relating to the Eighth Schedule occur in Article 344(1) and 351 of the Constitution.
 - Article 344(1) provides for the constitution of a Commission by the President on expiration of five years from the commencement of the Constitution and thereafter at the expiration of ten years from such commencement, which shall consist of a Chairman and such other members representing the different languages specified in the Eighth Schedule to make recommendations to the President for the progressive use of Hindi for official purposes of the Union.
 - Article 351 of the Constitution provides that it shall be the duty of the Union to promote the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions used in Hindustani and in the other languages of India specified in the Eighth Schedule, and by drawing, wherever necessary or desirable, for its vocabulary, primarily, on Sanskrit and secondarily on other languages.

List of languages in the Eighth Schedule

- The Eighth Schedule to the Constitution consists of the following 22 languages:

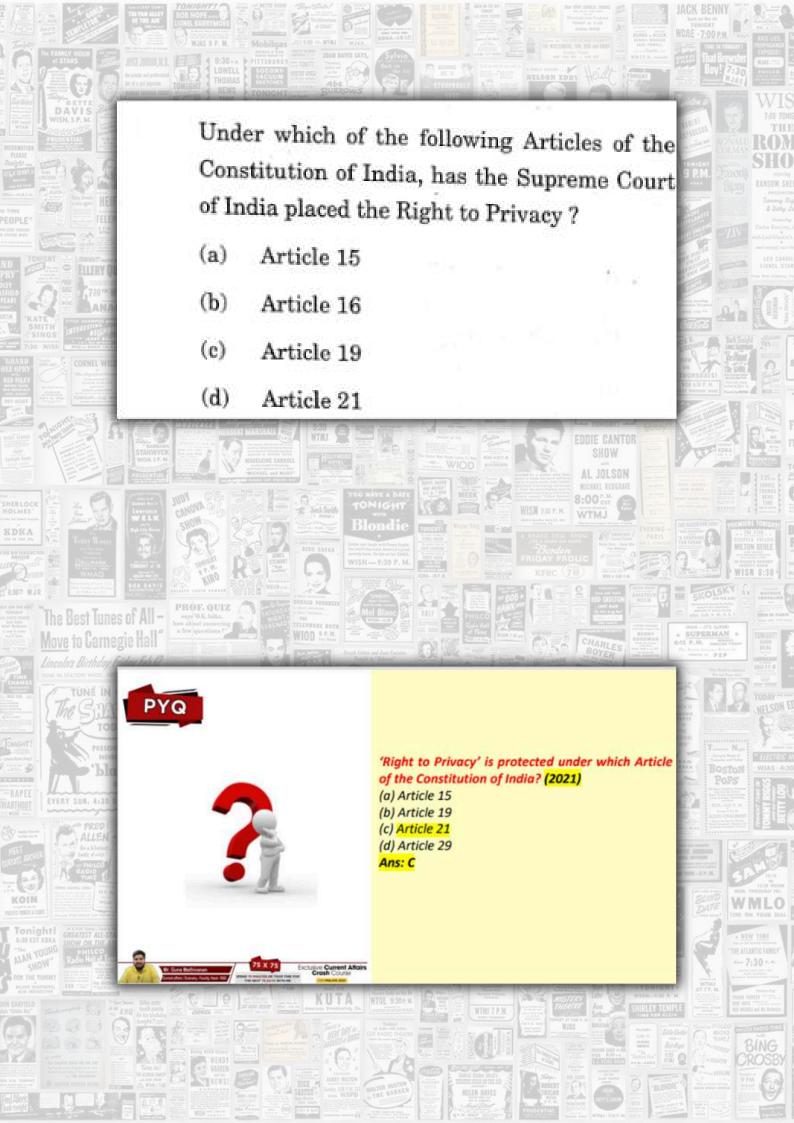
 (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.

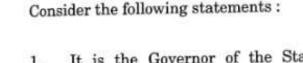
WML

Of these languages, 14 were initially included in the Constitution. Sindhi language was added in 1967. Thereafter three more languages viz., Konkani, Manipuri and Nepali were included in 1992. Subsequently Bodo, Dogri, Maithili and Santhali were added in 2004.

Demands of languages for inclusion in the Eighth Schedule

At present, there are demands for inclusion of 38 more languages in the Eighth Schedule to the Constitution.





- It is the Governor of the State who 1. recognizes and declares any community of that State as a Scheduled Tribe.
- A community declared as a Scheduled 2. Tribe in a State need not be so in another State.

Which of the statements given above is/are correct?

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

469. Criteria for Scheduling Tribes

· The framers of the Constitution took note of the fact that certain communities in the country were suffering from extreme social, educational and economic backwardness on account of the primitive agricultural practices, lack of infrastructure facilities and geographical isolation.

TIME

The Constitution of India in Article 366 (25) prescribes that the Scheduled Tribes means such tribes or tribal communities as are deemed under Article 342 of the Constitution to be Scheduled Tribes.

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Essentially, the President is the sole authority to notify tribal communities as Scheduled Tribes as per the Constitution of India, with the Governor playing a recommendatory role.



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Consider the following pairs:

Country	Reason for being in the news
Argentina	Worst economic crisis
Sudan .	War between the country's regular army and paramilitary forces
Turkey	Rescinded its membership of NATO
	Argentina Sudan

How many of the pairs given above are correctly matched?

- (a) Only one pair
- Only two pairs (b)
- All three pairs (c)
- (d) None of the pairs





Revise through PYQs

- In the recent years Chad, Guinea, Mali and Sudan caught international attention for which one of the following reasons is common to all of them? (2023)
- 🔼 Discovery of rich deposits 🛭 📵 Southward expansion of rare earth elements
 - of Sahara Desert
- Establishment of Chinese OSuccessful coups military bases







WMLO







- At present, NATO has 30 members.
- In 1949, there were 12 founding members of the Alliance: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the
- The other member countries are: Greece and Turkey (1952), Germany (1955), Spain (1982), the Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017) and North Macedonia (2020).
- NATO's Headquarters are located in Brussels,



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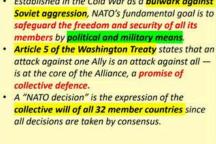


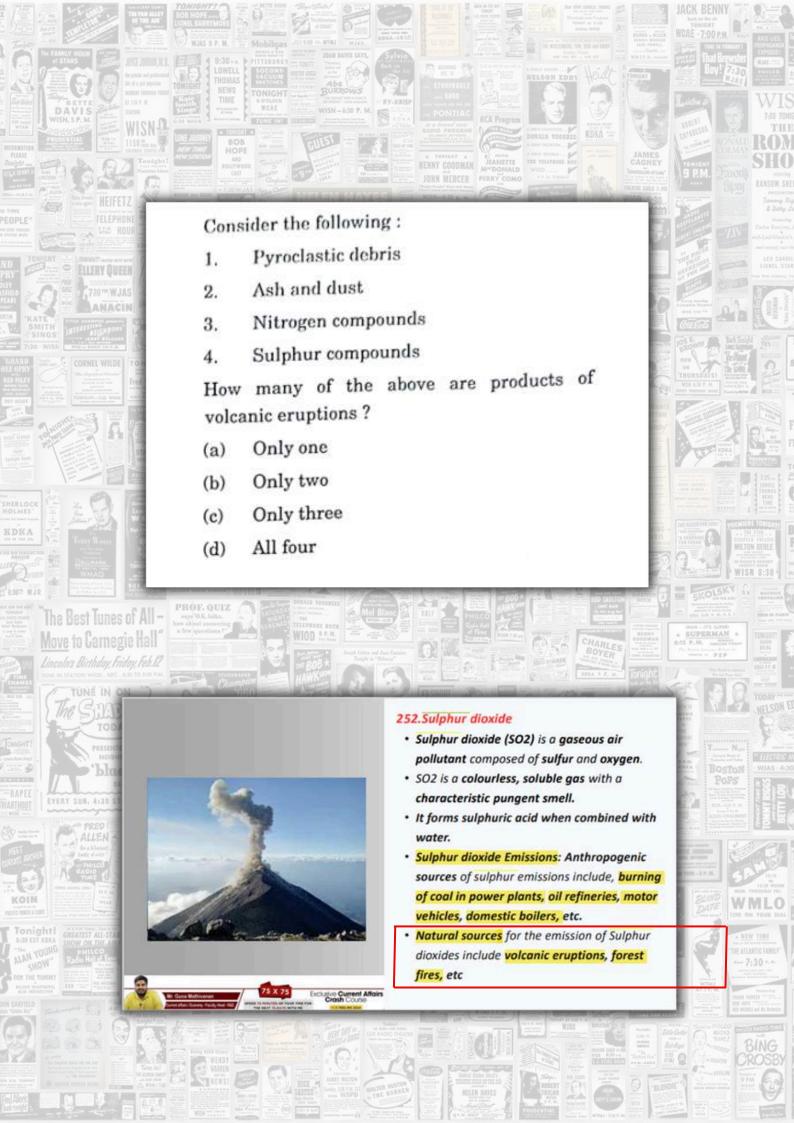


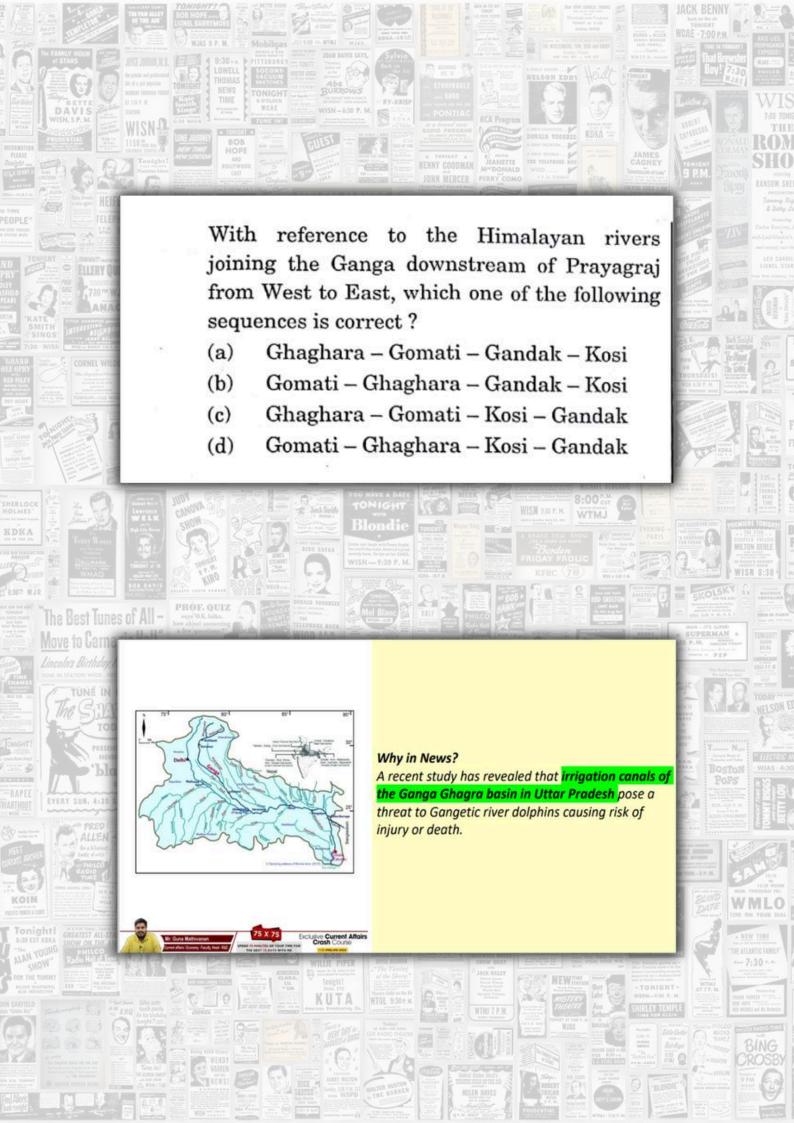


467. NATO

- Formed in 1949 with the signing of the Washington Treaty, NATO is a security alliance of 30 countries from North America and Europe.
- Established in the Cold War as a bulwark against safeguard the freedom and security of all its members by political and military mean
- attack against one Ally is an attack against all is at the core of the Alliance, a promise of collective defence.
- all decisions are taken by consensus.







With reference perfluoroalkyl polyfluoroalkyl substances (PFAS) that are used in making many consumer products, consider the following statements: PFAS are found to be widespread in 1. drinking water, food and food packaging

- materials.
- PFAS are not easily degraded in the 2. environment.
- Persistent exposure to PFAS can lead to 3. bioaccumulation in animal bodies.

Which of the statements given above are correct?

- 1 and 2 only (a)
- 2 and 3 only (b)
- (c) 1 and 3 only

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1, 2 and 3 (d)

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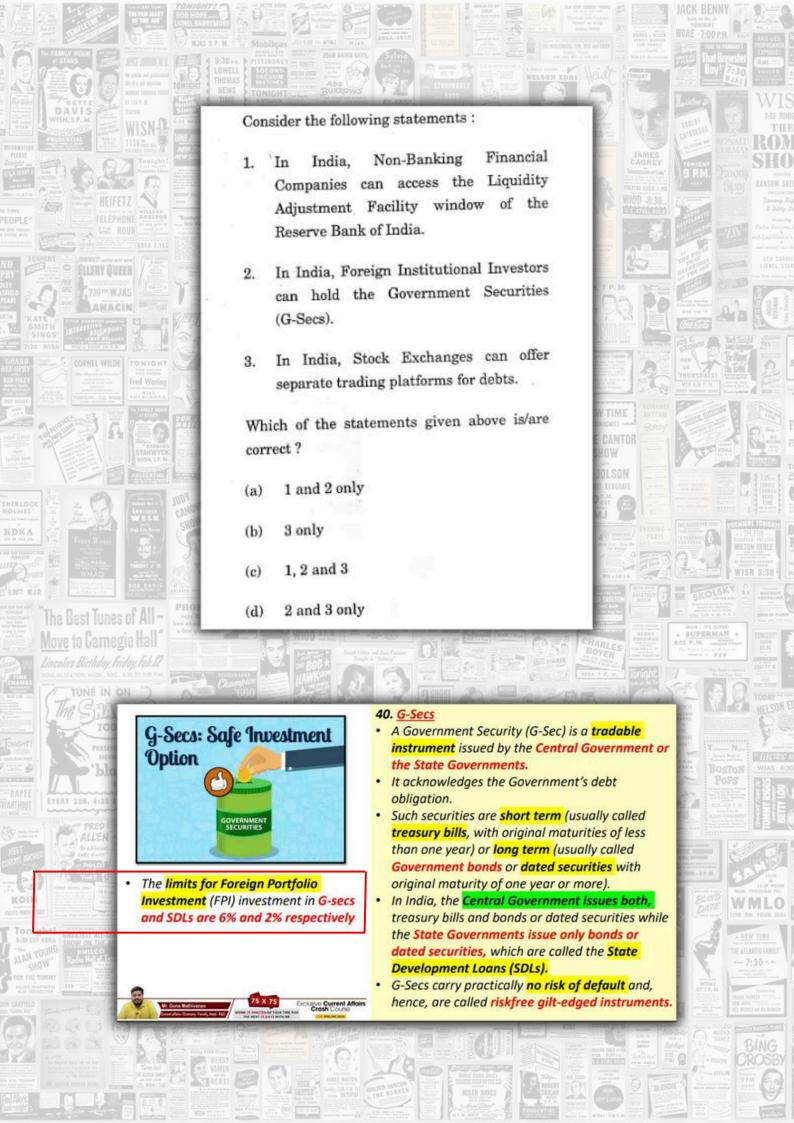
4. Forever chemicals

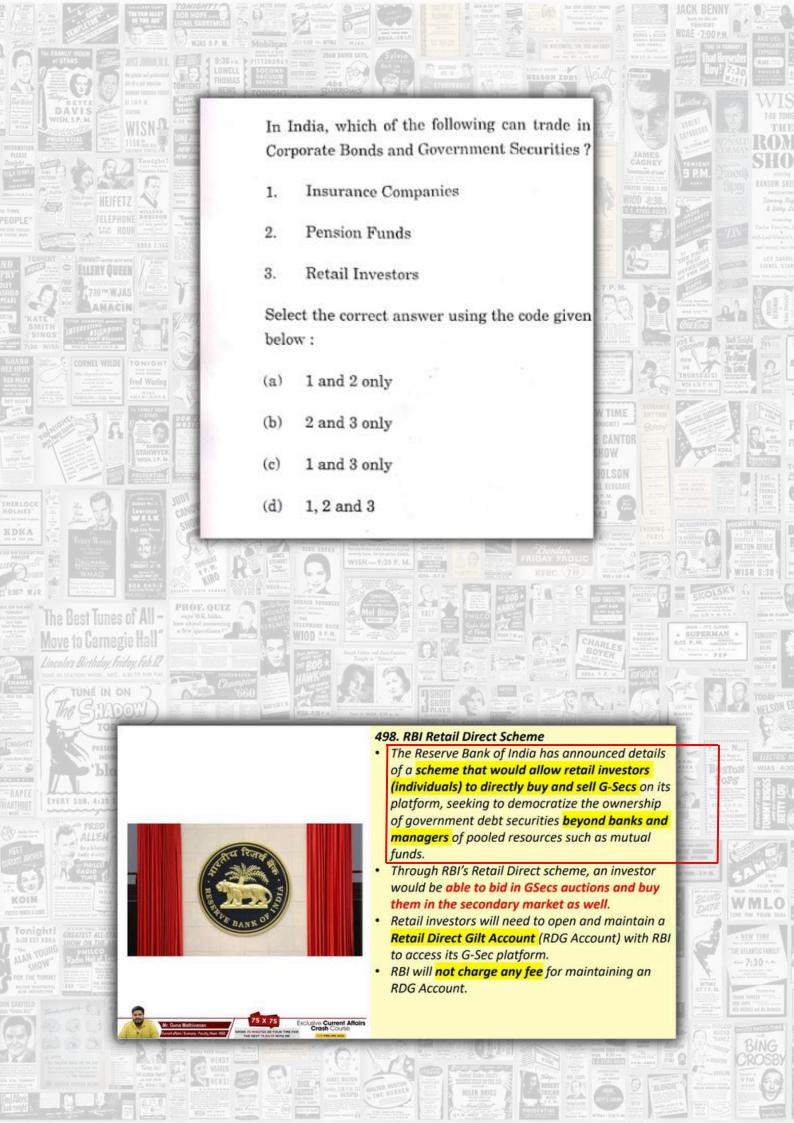
The Best Tunes of All-Move to Carnegie Hall'

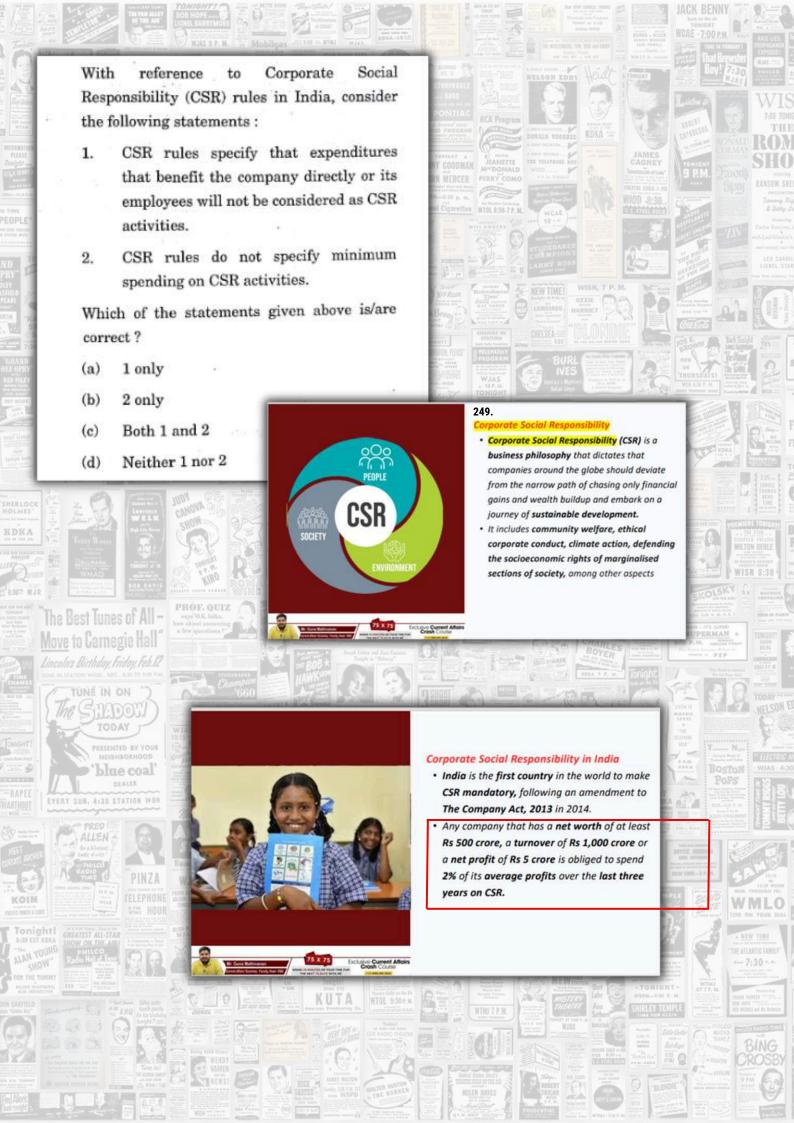
TODAY

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- Per- and polyfluoroalkyl substances (PFAS), known as "forever chemicals", are a large, complex group of synthetic chemicals that have been used in consumer products (such as nonstick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, firefighting forms, etc.) around the world.
- PFAs can migrate to the soil, water and air during their production and use. Since most PFAs do not break down, they remain in the environment for long periods of time.
- Some of these PFAs can build up in people and animals if they are repeatedly exposed to the chemicals.







Which of the following statements about the Ethics Committee in the Lok Sabha are correct?

- Initially it was an ad-hoc Committee.
- Only a Member of the Lok Sabha can make a complaint relating to unethical conduct of a member of the Lok Sabha.
- This Committee cannot take up any matter which is sub-judice.

Select the answer using the code given below:

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

RESENTED BY YOU

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330. Ethics Committee

History of Ethics Committees

 A Presiding Officers' Conference held in Delhi in 1996 first mooted the idea of ethics panels for the two Houses.

NEW TIME

SHOW

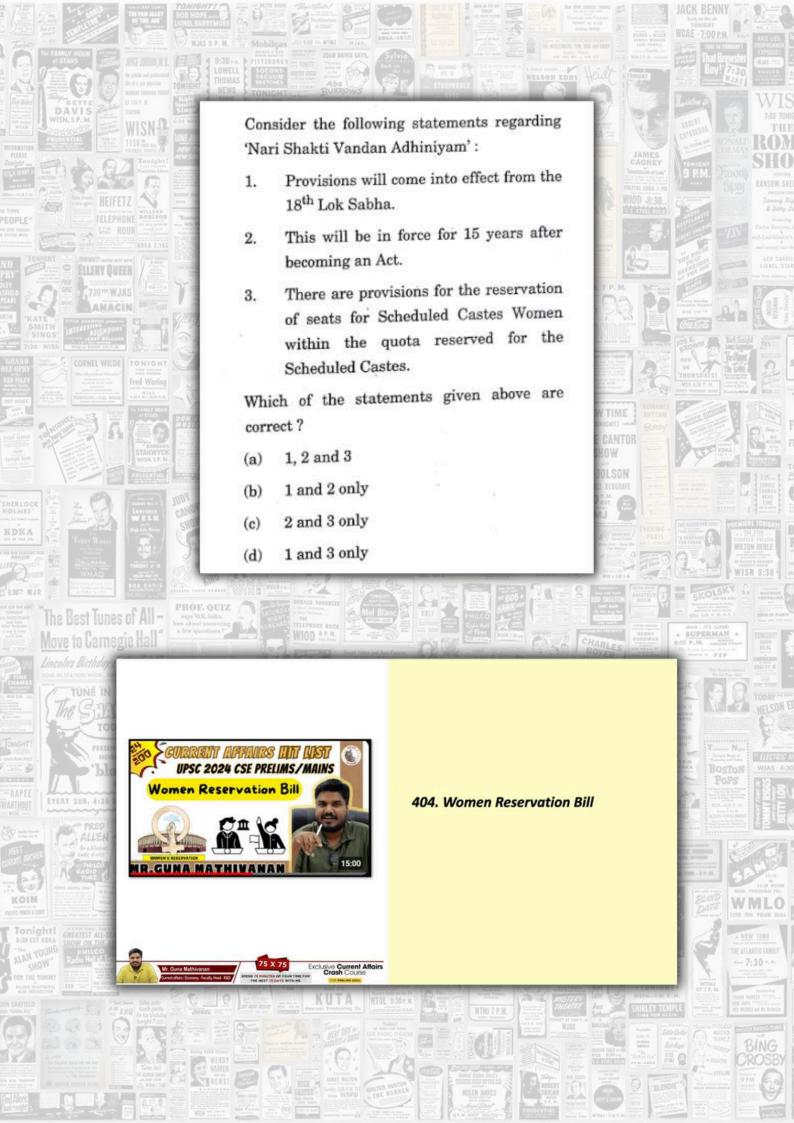
AL JOLSON MICHAEL REDGRAVE

- Then Vice President (and Rajya Sabha Chairman)
 K R Narayanan constituted the Ethics Committee
 of the Upper House in 1997 to oversee the moral
 and ethical conduct of members and examine
 cases of misconduct referred to it.
- In the case of Lok Sabha, the Committee of Privileges recommended the constitution of an Ethics Committee during the 13th Lok Sabha (1999-2004)
- The late Speaker, G M C Balayogi, constituted an ad hoc Ethics Committee in 2000, which became a permanent part of the House only in 2015.

How does the Ethics Committee function?

- The ethics committee oversees the moral and ethical conduct of members and examines cases of 'unethical conduct' referred to it.
- The Committee examines complaints filed against members of the House by other members; outsiders through a member; or referred by the Speaker.
- The Committee does not entertain complaints based only on media reports or on matters that are sub judice.
- The Committee makes a prima facie inquiry before deciding to examine a complaint and presents its report to the Speaker, who places it

It is left to the Committee to decide



Consider the following statements: Statement-I: India does not import apples from the United States of America. Statement-II: In India, the law prohibits the import of Genetically Modified food without approval of the competent authority. Which one of the following is correct in respect of the above statements? (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I (c) Statement-I is correct, but Statement-II is incorrect (d) Statement-I is incorrect, but Statement-II is correct. The Best Tunes of All **GM-Crops** UPSC CSE Prelims 2024 Move to Carnegie Hall' In India, Genetically modified organisms and products are regulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) TUNE IN ON under the provisions of the Environment (Protection) Act, 1986. The Genetic Engineering Appraisal Committee under MoEFCC is TODAY authorized to review, monitor and approve, import, export, transport, manufacture, use or sell GMO. blue coal GEAC's approval does not mean commercial cultivation, the final decision to allow commercial cultivation is taken by the MoEFCC. 4:30 STATION WOR . GM foods are also subjected to regulations by the Food Safety and Standards Authority of India (FSSAI) under the Food Safety and Standards Act, 2006. Status in India Earlier, India approved the commercial cultivation of only one GM KOIN WMLC crop, Bt cotton, but GEAC has recommended GM Mustard for commercial use. India has the world's fifth largest cultivated area under genetically modified(GM) crops, at 11.4 million hectares (mh) in 2017. Mr. Guna Mathivanan Head, R&D For more detals visit our Telegram Channel

Foreword

Officers Pulse-In Depth provides detailed analyses of significant articles from a variety of sources including The Hindu, Indian Express, Business Standard, Down To Earth, Yojana, Kurukshetra, and others. These insights are extremely valuable for UPSC CSE Mains preparation. To ensure comprehensive preparation for both Prelims & Mains, we recommend studying Officers Pulse-In Depth along with Officers Pulse-Digest.

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1) BHARAT FIRST STRATEGY IN FOREIGN POLICY

(GS-II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests)

Background:

- Foreign policy refers to a **set of goals, objectives, principles, guidelines, policies, strategies, actions and decisions adopted by a state** in its relations with other states to help it achieve its **objectives and best self-interests**.
- India's foreign policy has evolved from an **idealistic approach** (period just after independence) to a **pragmatic-realistic approach** in the current times.
 - o Idealistic approach of India was evident through **belief in the fairness** of international organisations and global powers.
 - o India taking the **Kashmir issue** to the United Nations Organisation (UNO) to solve it in a fair manner is an example of idealistic approach.
 - o Realistic approach gives first importance to India's interest and welfare.
 - o **India buying cheap Russian oil** even after criticism from European countries is an outcome of this policy.
- In this scenario, India's external affairs minister has outlined the principles guiding India's **Bharat First strategy** in foreign policy.

India's move towards Bharat First Strategy:

- **Assertiveness and Independence in Decision Making:** India demonstrates a willingness to take stands when necessary, without succumbing to external pressures. This indicates a commitment to protecting and advancing its interests on the global stage.
- **Multi-Vector Diplomacy:** India pursues a diplomatic strategy that **maximises partnerships while minimising problems.** This approach allows India to engage with various countries and regions effectively, ensuring its interests are served across different fronts.
- Active Participation in International Initiatives: India actively participates in various international initiatives, such as Quad, BRICS, I2U2, SCO, and East Asia Summit, with a focus on advancing its interests and maintaining political balances in a changing world.
- **Strategic Autonomy and Self-Sufficiency:** India acknowledges the importance of strategic autonomy and self-sufficiency, particularly in critical infrastructure and basic needs. Policies such as **"Make in India"** are designed to enhance economic and national security while reducing dependence on external sources.
- **International Collaboration and Engagement:** If India is to emerge as a leading power, it must develop deep national strengths. This strength can come from expanding manufacturing as that serves as the foundation for technology.
 - o International supply chains are being rebuilded to ensure more reliable manufacturing especially in domains like semiconductors, electric mobility and green technologies. India works hard to include itself in this renewed network.
- Recognition of Indian Skills and Talent: As the world faces demographic changes, India
 aims to capitalise on the growing recognition of Indian skills and talent globally. This
 involves expanding education and training capacities and ensuring compatibility with Indian
 values and practices.
- Regional Connectivity and Logistics projects: India recognizes the benefits of free
 connectivity and logistics across countries. Initiatives such as the IMEC corridor, INSTC,
 and the Trilateral Highway aim to enhance connectivity and reduce risks associated with
 supply chain disruptions.

Conclusion:

• The pathway to reaching the goal of Viksit Bharat in the next 25 years will have many requirements. Among those, a strong sense of "Bharat First", where we have our national interest as the primary metric of judgement takes an important role.

2) IDEA OF MENSTRUAL LEAVE

(GS-I: Role of Women and Women's Organization, Population and Associated Issues, Poverty and Developmental Issues, Urbanization, their problems and their remedies)

Definition:

- Menstrual leave enables a person to take time off from work when period symptoms make it difficult to perform work tasks.
- Several international organisations have promoted menstrual leave as a women's right. For instance, an **International Labour Organisation report**, in 2003, asked nations to recognise menstrual leave.

States and Countries providing Menstrual leave:

- **Kerala**, in 2023, introduced menstrual and maternity leave to all students above the age of 18.
- Japan introduced menstrual leave in 1947, Indonesia in 1948, and South Korea. Taiwan and Vietnam have also implemented paid leave.
- In relation to the Asian countries, the progress made by the western world, except in Sweden and Spain, is still abysmal.

Potential Benefits:

- **Promotes Menstrual health:** Menstrual leave can benefit those who experience discomfort from menstruation, and those who experience menstrual cycle-related illnesses.
- **Destigmatising Menstruation:** The social unacceptability of the discussion of menstrual symptoms can result in **societal pressure** to keep menstrual distress a secret from coworkers and health professionals alike.
 - Here, a menstrual leave may offer women the **opportunity to speak up** about their menstrual cycle-related health issues, and to take time to recover or seek treatment.
 - Discussion of menstruation has the potential to normalise it, and therefore destigmatizes the conversation surrounding it.
- **Increased Efficiency:** As women get time to recover from their discomfort, a comfortable work environment is created. Such an environment allows them to work with high efficiency.

Potential Drawbacks:

- **Perpetuating Sexist Beliefs and Attitudes:** Both hostile and benevolent sexism have been found to result in evaluating a menstruating woman more negatively than a non-menstruating woman.
- **Contributing to Menstrual Stigma:** Menstrual leave brings menstruation to light in the workplace. This unmasking of menstruation in public spaces might increase stigma rather than decreasing it.
 - Menstrual leave may also perpetuate the belief that menstruation is something about which to be ashamed and to be kept private, and therefore avoided in the workplace.
- 'Outing' in the Workplace: The term 'outing' is used to refer to an occurrence in which a member of the LGBTQ+ community's gender identity or sexual orientation is revealed by another person or entity without their permission, which may lead to discrimination, shaming, and violence.
 - It can also be used to refer to the disclosure of one's menstrual status without the menstruator's consent.

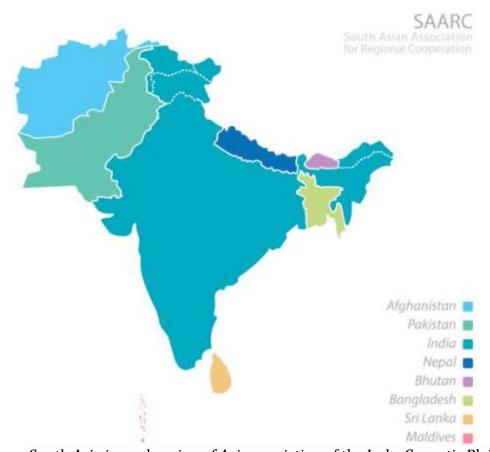
- Enforcing a workplace practice concerning menstruation may require explicit and public definitions for matters that usually remain implicit and private.
- **Justifying discrimination:** Menstrual leave may have the potential to perpetuate the assumptions that women are unfit for the workplace and thus, justify gender discrimination.
 - o For example, it has been reported that women in China are hesitant to use menstrual leave days because they fear that the disclosure of their menstrual status could reinforce stereotypes of female fragility and unproductivity.

Conclusion

• Starting of public policy discussions on menstruation can lead to reduced stigma and a gender-sensitive world.

3) INDIA AND ITS POSITION IN SOUTH ASIA

(GS-II: India and its Neighborhood- Relations)
Background



- South Asia is a subregion of Asia consisting of the Indo-Gangetic Plain and peninsular India.
- Countries: It includes the countries of Bangladesh, Bhutan, India, Pakistan, Nepal, and Sri Lanka. Afghanistan and the Maldives are often considered part of South Asia as well.
- **Boundaries:** The region is bounded to the north by a series of mountain ranges: the **Hindu Kush** to the northwest, the **Karakoram Range** in the central north, and the **Himalayas** to the northeast.
 - o To the South, **Indian Ocean, Arabian Sea and Bay of Bengal** form the boundaries.
- The region has been influenced by the hostile relations between India and Pakistan and has become **one of the least integrated regions of the World.**

- South Asia is very important from **geopolitical considerations in the Indo-Pacific**, due to **important sea lines of communication (SLOC)**, maritime potentials and being home to around two billion people with the **most dynamic and fast-growing economies**.
- India is the largest country in South Asia in most parameters and assumes a significant position in South Asia as it shares land or maritime borders with all the countries in the South Asian region, and therefore, assumes a pivotal link in the region.
- In recent years, India's traditional position has come under **Chinese challenge**.

Challenges posed by China in South Asia:

- **Geopolitical Competition:** China's rise as a global power in the neighbourhood gives a new situation as India is facing stiff geopolitical competition for influence in South Asia.
- **Power Vacuum:** The withdrawal of the United States from the region has allowed China to fill the resulting power vacuum, further strengthening its position and influence.
- **Neighbouring Countries' Strategies:** South Asia's smaller powers, including India's neighbours, are adopting various strategies such as balancing, bargaining, hedging, and bandwagoning to navigate the changing dynamics, often viewing China as a useful hedge against India.
 - All of India's neighbours except Bhutan are part of China's Belt and Road Initiative (BRI), which is an ambitious connectivity and infrastructure project.
- **Strategic Engagement in the Indo-Pacific:** India's focus on the Indo-Pacific and alignment with countries like the United States, Japan, and Australia may have diverted attention and resources away from its immediate neighbourhood, allowing China to expand its influence unchecked.

Ways to tackle Chinese challenge in the region:

- **Acknowledge Changing Realities:** India must acknowledge the fundamental changes in the region's geopolitics and its own diminished influence.
- **Leverage Traditional Strengths:** Rather than directly competing with China in every aspect, India should focus on leveraging its traditional strengths and cultural ties, such as reclaiming its Buddhist heritage.
- **Focus on Maritime Advantages:** Given the challenges in its continental strategy, India should prioritise its maritime advantages in the Indo-Pacific. This involves enhancing trade, forming minilateralism, and creating issue-based coalitions.
- **Engage Smaller South Asian Neighbours:** India should actively engage with its smaller South Asian neighbours, including Sri Lanka, the Maldives, and Bangladesh, within the framework of the Indo-Pacific strategy. This could involve including them in strategic conversations and offering them alternatives to China-led initiatives.
- **Embrace Non-India Centric Lens:** India should adopt a more open approach to the region, accepting the presence of external powers and seeking partnerships with friendly actors to address common challenges.
- **Utilise Soft Power:** India should make creative use of its soft power to retain influence in the region. This includes encouraging informal contacts between political and civil society actors across South Asian countries and facilitating informal conflict management processes where direct involvement might be challenging.

Conclusion

• A country which is able to maintain primacy in its region can grow into an important power on the international level. India's efforts towards South Asia should be based on this goal.

4) SUSTAINABLE DEVELOPMENT GOALS

(GS-III: Inclusive Growth and issues arising from it)
Definition:

• The Sustainable Development Goals (SDGs) are a **set of 17 interconnected global objectives** aimed at addressing pressing social, economic, and environmental challenges to achieve sustainable development by 2030.





- These goals were **adopted by the United Nations General Assembly in 2015 as part of the 2030 Agenda for Sustainable Development,** the SDGs were built upon the Millennium Development Goals (MDGs) and encompass a broader and more ambitious agenda.
- These goals cover a wide range of issues, including poverty eradication, quality education, gender equality, clean water and sanitation, affordable and clean energy, sustainable cities and communities, climate action, life below water, and life on land, among others.
- Each goal is accompanied by **specific targets (a total of 169)** to guide efforts towards its achievement.
- Every year, the **UN Secretary General presents an annual SDG Progress report**, which is developed in cooperation with the UN System, and based on the global framework and **data** from **national statistical systems**.
- While the **SDGs are non-binding**, all countries have committed to working towards their achievement, recognizing that these goals are a path towards sustainable development.
- However, **progress towards the SDGs has been slow**, with challenges exacerbated by factors such as the **COVID-19** pandemic and insufficient attention to environmental goals.

Few Reasons for slow progress:

- **Impact of COVID-19:** Around the globe, the COVID-19 pandemic is still having a profound impact on the mental and physical health and well-being of individuals, households and communities worldwide.
- **Rising levels of conflict war and instability:** The world is currently witnessing the highest level of State-based armed conflicts seen since 1945.

- Violent conflict disrupts human development and causes insecurity, but also diverts private and public resources to spending on defence and reconstruction.
- o For instance, in the **Sahel region of Africa** progress across the Sustainable Development Goals is being blocked by the growth of armed groups in the region. Between March and May 2022, approximately 26.5 million people in the Sahel were in crisis or worse with respect to food and nutrition.
- Inflation and the cost-of-living: The pandemic and subsequent recovery pushed up prices for food and energy, which rose further as a result of the conflicts in Ukraine, Gaza and Red Sea.
- Lack of Attention to Environmental Goals: There has been little or no attention towards goals related to the environment and biodiversity. These include responsible consumption and production, climate action, life below water, and life on land.
- Going against the Integrated Nature of SDGs: The current practice of pursuing SDGs goes against the integrated and indivisible nature of the goals. There's a concern that pursuing SDGs separately without recognizing their interconnectedness may lead to accelerated environmental degradation.

Solutions to move towards SDGs:

- **Developing a Shared Transformation Framework** which involves the following.
 - National plans of action to counter negative trends or stagnation in SDG implementation.
 - o **Incorporation of local and industry-specific plans** into national plans.
 - Implementing initiatives to increase fiscal space through measures such as tax reforms, debt restructuring, and increased engagement by international finance institutions.
 - o Investing in data related to the SDGs, science-based tools, and policy learning.
 - o **Strengthening partnerships** to enhance the science-policy-society interface.
 - o **Improving accountability** of governments and other stakeholders.
- **Building Capacity for Transformation** by enhancing individual, institutional, and network-level capacities to strategize, innovate, manage conflicts, and cope with crises and risks.
- **Implementing comprehensive interventions** by implementing key interventions for sustainability transformation **to achieve coherence and equity,** ensuring advances in human well-being are not at the expense of climate, biodiversity, and ecosystems.
- Improving Fundamental Conditions for Implementation which includes:
 - o Investing in **conflict prevention and resolution.**
 - Supporting marginalised groups.
 - o Leveraging the **digital transformation**.
 - o Investing in **gender equality.**
- **Transforming Science and Approaches** by ensuring that science, policy, and society work together for a future where people and nature can thrive as one.

Conclusion

• Achieving the Sustainable Development Goals requires integrated and collaborative efforts while also addressing the concerns in the development process. Such a pathway towards SDGs ensures human well-being for a sustainable future.

5) INDIA-MYANMAR RELATION

(GS-II: India and its Neighborhood- Relations)

Context:

- Recently, Myanmar's army claimed success in retaking **Myawaddy** from the antigovernment coalition.
 - Myawaddy is a critical node in the bustling trade route with its eastern neighbour, Thailand.
- Different towns of Myanmar have come under the control of the rebel forces since 2021.
- As the threat from the collapsing authority of the Myanmarese state envelops the rest of the region, the intervention of external powers has become acute.
- In this scenario, the role of India as Myanmar's neighbour needs to be examined.

Background:

- India-Myanmar relations are rooted in shared historical, ethnic, cultural and religious ties.
- As the land of Lord Buddha, India is a country of pilgrimage for the people of Myanmar.
- The geographical proximity of the two countries has helped develop and sustain cordial relations and facilitated people-to people contact. India and Myanmar share a long land border of over 1600 km and a maritime boundary in the Bay of Bengal.
- A **large population of Indian origin** (according to some estimates about 2.5 million) lives in Myanmar.
- **India and Myanmar signed a Treaty of Friendship in 1951.** The visit of the Prime Minister Rajiv Gandhi in 1987 laid the foundations for a stronger relationship between India and Myanmar.
- In 2018, both countries signed a landmark 'Land Border Crossing Agreement' to deal with the pending border problems along with issues relating to smuggling and illicit drug trafficking.

Challenges in India's relations with Myanmar:

- **Political instability in Myanmar:** The state of emergency imposed in Myanmar in 2021. This is followed by a civil war between the army and the different armed groups that have disrupted the stability of the region. This has put India in a tough situation with no stable government to engage.
- Border security and insurgency: illegal immigration, drug trafficking, and gun running are major concerns along the India-Myanmar border, especially since the 2021 coup in Myanmar.
 - o Myanmar is part of the **Golden Triangle region** along with Thailand and Laos, which is notorious for illegal drug trade.
- **Refugee** issues: Myanmar has faced various conflicts leading to outmigration of populations. The illegal migration of tribal Kuki-Chin peoples into India from Myanmar is one of the key issues in the ongoing **Manipur conflict.**
- **Limited progress in economic cooperation:** Despite the potential for economic cooperation, bilateral trade between India and Myanmar has not reached its full potential. Various factors such as trade barriers, infrastructural challenges, and bureaucratic hurdles may hinder the growth of economic ties between the two countries.
- Infrastructure development and connectivity: While there have been efforts to enhance connectivity between India and Myanmar through projects like the Kaladan Multimodal Transit Transport Project and the Trilateral Highway Project, progress has been slow and continues to impede smooth connectivity and trade between the two countries.

- Role of China: Myanmar's military establishment shares a close relationship with China. Myanmar is also part of China's Belt and Road Initiative. This closeness with China hinders meaningful relations with India.
- **Defence cooperation dynamics:** While there is a strong pillar of defence cooperation between India and Myanmar, including high-level visits and capacity building initiatives, differences in strategic priorities pose challenges in aligning defence interests effectively.

Way Forward:

• India's relations with Myanmar are multilayered: old historical ties, strong relations during the anti-colonial struggles of both nations against British rule. Comprehensive approach through effective cooperation with the different powers in Myanmar.

6) HUMAN DEVELOPMENT REPORT

(GS-III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment)

Human Development Report:

- The Human Development Report (HDR) is an **annual publication** by the **United Nations Development Programme (UNDP).**
- It aims to measure and assess various aspects of human development across countries worldwide.
- The report provides insights into key indicators such as life expectancy, education, income, and overall standard of living.
- Its primary focus is to **shift the emphasis of development policies from purely economic growth to a more holistic approach** that includes human well-being and quality of life.

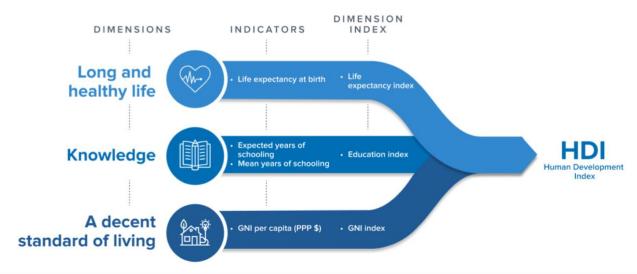
Primary constituents of the Human Development Report:

- **Human Development Index (HDI):** The HDI is a composite index that measures a country's average achievements in three basic dimensions of human development. The HDI is one of the most widely used indicators of human development.
- **Inequality-adjusted Human Development Index (IHDI):** While the HDI provides a snapshot of average human development within a country, the IHDI adjusts the HDI to **account for inequality in distribution across the population.** It reflects the extent to which **inequality reduces human development.**
- **Gender Inequality Index (GII):** The GII measures **gender disparities** in three key dimensions of human development. It provides insights into gender gaps in various aspects of life within a country.
- Multidimensional Poverty Index (MPI): The MPI goes beyond income-based measures of
 poverty by assessing multiple deprivations in health, education, and living standards. It
 provides a more comprehensive understanding of poverty and helps policymakers identify
 vulnerable populations in need of targeted interventions.
- Other thematic chapters: The HDR often includes thematic chapters that delve into specific issues related to human development, such as climate change, urbanisation, technological innovation, or migration. These chapters provide in-depth analysis and policy recommendations on emerging challenges and opportunities for human development.

Human Development Index:

- The **Human Development Index** is a summary measure of average achievement in **key dimensions** of human development:
 - o a long and healthy life,
 - o **being knowledgeable** and
 - o having a **decent standard of living.**

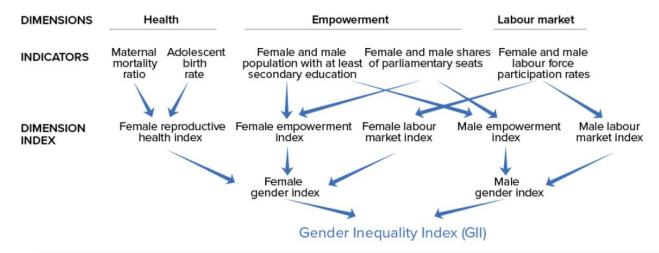
HDI Dimensions and Indicators



- The HDI is the **geometric mean** of normalised indices for each of the **three dimensions**.
 - The health dimension is assessed by life expectancy at birth.
 - The education dimension is measured by average years of schooling for adults aged 25 years and more; and expected years of schooling for children of school entering age.
 - The **standard of living** dimension is measured by **gross national income per capita.**
- The HDI can be used to question national policy choices, asking how two countries with the same level of GNI per capita can end up with different human development outcomes.
- The HDI simplifies and captures only part of what human development entails. It does **not reflect on inequalities, poverty, human security, empowerment,** etc.

Gender Inequality Index (GII):

• GII is a **composite metric of gender inequality** using three dimensions: reproductive health, empowerment and the labour market. A **low GII value indicates low inequality** between women and men, and vice-versa.



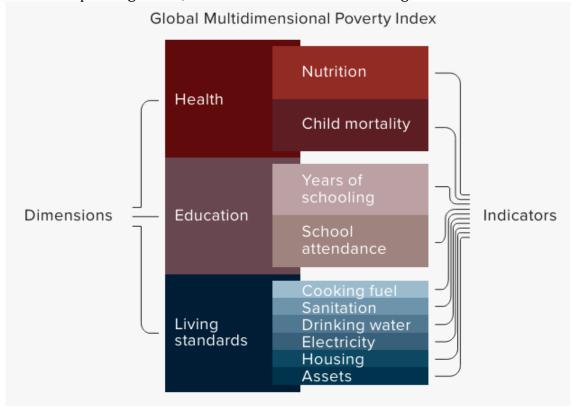
- GII reflects **gender-based disadvantage** in three dimensions— **reproductive health, empowerment and the labour market**.
- It shows the **loss in potential human development due to inequality** between female and male achievements in these dimensions.

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• It ranges from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions.

Multidimensional Poverty Index (MPI):

- The global MPI is a key international resource that **measures multidimensional poverty** across more than 100 developing countries.
- The global MPI begins by constructing **a deprivation profile (indicators not present in the households)** for each household and person in it that tracks deprivations in 10 indicators spanning health, education and standard of living.



- All indicators are equally weighted within each dimension, so the health and education indicators are weighted 1/6 each, and the standard of living indicators are weighted 1/18 each.
- MPI values are the **product of the incidence** (H, or the proportion of people who live in multidimensional poverty) and **intensity of poverty** (A, or the average deprivation score among multidimensionally poor people). Put simply, **MPI** = **H** × **A**.
- The **MPI ranges from 0 to 1,** and higher values imply higher poverty.
- Global MPI values decline when fewer people are poor or when poor people have fewer deprivations.

India and HDI:

- With an **HDI value of 0.644**, the HDR (2023-24) places **India** in the **medium human development category**. Between 1990 and 2022, the country saw its HDI value increase by 48.4 percent, from 0.434 in 1990 to 0.644 in 2022.
- India has also shown progress in **reducing gender inequality and ranks 108 out of 166 countries in the GII 2022.** The GII measures gender inequalities in three key dimensions reproductive health, empowerment, and labour market.
- The country's GII value of 0.437 is better than the global average of 0.462 and the South Asian average of 0.478.

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- India's performance in reproductive health is better than the average of other countries in the medium human development group or South Asia.
- India's adolescent birth rate in 2022 was 16.3 (births per 1,000 women ages 15-19), an improvement from 17.1 in 2021.
- However, India also has one of the largest gender gaps in the labour force participation rate—a 47.8 percentage point difference between women (28.3%) and men (76.1%).

Challenges for India to reach high HDI:

- **Income and wealth inequality:** India faces significant income and wealth inequality, with the top earners accumulating a disproportionately large share of national income and wealth. This inequality affects the distribution of resources and opportunities, impacting overall human development.
- **Gender disparities:** Despite improvements in the Gender Inequality Index (GII), India still struggles with gender gaps in various aspects, including labor force participation. The significant difference between women and men in labor force participation rates indicates ongoing challenges in achieving gender equality, which is crucial for overall human development.
- **Rising inequality:** The Human Development Report highlights concerns about rising inequality globally, with implications for human development. India's loss in HDI, when adjusted for inequality, is substantial, indicating that inequality exacerbates challenges in achieving higher levels of human development.
- **Economic polarisation:** The skewed income distribution and growth patterns suggest a potential reduction in the size of the middle class, with economic polarisation between the affluent and the rest of the population. Such polarisation can hinder inclusive development and exacerbate social tensions.
- **High household debt levels:** The increasing household debt levels, coupled with low savings rates, pose challenges to economic stability and long-term development. High debt levels can limit households' ability to invest in education, healthcare, and other human capital-enhancing activities, impacting overall human development outcomes.

Way Forward:

• An alternate growth strategy that prioritises human development as a means to accelerate overall growth. This requires political will and a shift in the development narrative to focus on long-term human welfare rather than short-term gains.

7) FEMALE LABOUR UTILISATION

(GS-II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Context

- The latest Report of **Periodic Labour Force Survey (PLFS) 2021-22** is evident of increased Female Labour Force Participation Rate (LFPR) in India.
- Though it is lower than the male, female LFPR is significantly increasing over the years and at present, around one third of women have joined the labour force.
- As per the latest PLFS report, **around 32.8% females of working age** (15 years and above) were in the **labour force in 2021-22** which was just 23.3% in 2017-18.
- The major push came from the rural sector than the urban sector, where it increased by 12.0 and 3.4 percentage points, respectively.
- In **rural areas**, female **LFPR is at 36.6%** during 2021-22 and in **urban areas it was 23.8%** in the same period.
- These numbers are significantly lower and there is a need to increase women participation in the labour force to accelerate India's development.

Reasons for differential LFPR:

- **Traditional Gender Roles:** In many parts of India, traditional norms dictate that women are primarily responsible for household chores and caregiving. This limits their availability and ability to participate in the labour force.
- **Family and Marital Responsibilities:** Women often face pressure to prioritise marriage and family responsibilities over career ambitions, which can lead to lower labour force participation.
- **Educational Attainment:** Although educational attainment among women has improved, disparities in access to quality education and vocational training persist. This affects their employability and participation in the workforce.
- **Skill Mismatch:** There is often a mismatch between the skills women possess and the requirements of the labour market, limiting their employment opportunities.
- **Wage Disparity:** Women frequently face wage discrimination, earning less than men for the same work. This can discourage them from seeking employment.
- **Job Availability:** Sectors that predominantly employ women, such as agriculture and textiles, often offer low wages and poor working conditions. Limited opportunities in higher-paying sectors reduce overall female participation.
- **Workplace Safety:** Concerns about safety and harassment in the workplace or in travel to workplace can deter women from seeking employment, particularly in industries where such risks are perceived to be higher.
- **Inadequate Support Systems:** Insufficient childcare facilities and maternity benefits can make it challenging for women to balance work and family responsibilities.
- Lack of Access to Capital: Women often have less access to financial resources and credit, which limits their ability to start and sustain businesses. Economic dependence on male family members can discourage women from seeking employment, as their financial contribution may not be seen as necessary.

Measures needed to increase Female LFPR:

- Expanding Manufacturing Opportunities: Bringing labour-intensive sectors like readymade garments, footwear, and light manufacturing under schemes like the Production Linked Investment (PLI) can create more job opportunities for women.
 - Address cost disadvantages and regulatory hurdles that hinder job creation in these sectors, particularly focusing on providing incentives for women's employment.
- **Enhancing Skilling and Formal Employment:** Implementing targeted initiatives to improve access to relevant and affordable skilling programs for women, especially in sectors with high potential for formal employment can help.
 - o Increase the number of **training institutes** catering **exclusively to women** and provide financial support such as scholarships and subsidised loans to encourage their participation.
 - Establish career counselling and job placement cells in training institutes to facilitate better employment outcomes for women post-training.
- Improving Urban Infrastructure and Mobility: Develop urban infrastructure and transportation systems with a gender lens to enhance women's mobility and access to education and employment opportunities.
 - Create high-quality, subsidised urban care infrastructure to reduce women's caregiving responsibilities and enable their participation in the labour force.
- Promoting Clean Energy Adoption:

- Incentivize households to adopt clean cooking technologies through initiatives like cash rebates and production incentives, reducing women's time spent on domestic chores.
- Scale up programs like the **Pradhan Mantri Ujjwala Yojana (PMUY)** to facilitate the transition to cleaner cooking fuels and improve women's health and productivity.

• Investing in Women's Education:

- Enhance investments in women's education to improve their human capital and enable them to access higher-quality employment opportunities.
- o Implement policies to **ensure equal access to education for women,** including addressing barriers such as distance to schools and cultural norms.

• Addressing Gender Stereotypes and Norms:

- Launch awareness campaigns to challenge gender stereotypes and promote the value of women's participation in the labour force.
- Encourage the **involvement of men** and community leaders in advocating for women's rights and equal opportunities in the workforce.

Conclusion:

• As history has shown, women are empowered when they step out of their homes with quality skills and enter market work only when their education levels rise and "good" jobs appear. Improving the value of investments in women's human capital, and at a low cost, is our best bet for engendering gender parity and creating a "developed" society.

8) CYBER SECURITY IN AN AI INFUSED WORLD

(GS-III: Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Biotechnology and issues relating to Intellectual Property Rights)

Definitions:

- Cyber Security: Cyber security is how individuals and organisations reduce the risk of cyber attack.
 - Cyber security's core function is to protect the devices we all use (smartphones, laptops, tablets and computers), and the services we access - both online and at work - from theft or damage.
 - o It's also about **preventing unauthorised access** to the vast amounts of personal information we store on these devices, and online.
- Artificial Intelligence (AI): Artificial intelligence, or AI, is technology that enables
 computers and machines to simulate human intelligence and problem-solving
 capabilities.
 - On its own or combined with other technologies (e.g., sensors, geolocation, robotics)
 AI can perform tasks that would otherwise require human intelligence or intervention.
 - Open AI's Chat GPT) are just a few examples of AI in the daily news and our daily lives.
 - o **Generative AI** refers to deep-learning models that can generate high-quality text, images, and other content based on the data they were trained on.

Challenges in Cybersecurity due to AI:

- **Increased Phishing Incidents:** There has been a significant increase in phishing incidents/emails, along with credential phishing, attributed to the utilisation and manipulation of generative AI.
 - o **Phishing** attacks are the practice of sending fraudulent communications that appear to come from a reputable source. The goal is to steal sensitive data like credit card and

login information, or to install malware on the victim's machine. Phishing is a common type of cyber attack.

- **Advanced Cyber Threats:** The rise of generative AI has led to the emergence of sophisticated cyber threats, with hacker groups leveraging AI solutions for translating and identifying coding errors to maximise the impact of cyberattacks. These advanced threats are difficult to detect and mitigate.
- **Manipulation via Generative AI:** While generative AI has enhanced productivity, its increasing manipulation has resulted in the vulnerability of organisations to attacks. This includes undetectable phishing attacks, a rise in the volume of attacks, and growing privacy concerns.
- **Biometric Identification Systems:** The use of remote and real-time biometric identification systems, such as facial recognition, raises privacy concerns and endangers individuals' rights. These systems can be exploited for malicious purposes, compromising personal information.
- Lack of Regulatory Frameworks: There are loopholes and a lack of industrial understanding/comprehension in regulating generative AI. This absence of robust regulatory frameworks allows for the misuse of AI technologies, contributing to cybersecurity challenges.

Steps to tackle these Challenges:

- **Development of Ethical Guidelines and Regulatory Frameworks:** Establish comprehensive ethical guidelines and regulatory frameworks to govern the development, deployment, and use of AI technologies.
- **Development of Detection and Response Mechanisms:** Invest in advanced detection and response mechanisms capable of identifying and reducing AI-driven cyber threats in real-time. This includes **deploying AI-powered security solutions** that can analyse patterns, detect issues, and respond faster to potential threats.
- Collaborative Information Sharing: Foster collaboration and information sharing between government agencies, cybersecurity experts, industry stakeholders, and international partners to exchange threat intelligence and best practices for combating AI-driven cyber threats.
- **Investment in AI Security Research and Development:** Allocate resources for research and development focused on enhancing the security of AI technologies. This includes funding initiatives to develop AI algorithms resilient to adversarial attacks, improve AI explainability, and strengthen AI model security.
- **Promotion of Digital Literacy and Awareness:** Educate individuals about the risks associated with AI-driven cyber threats, teach them how to identify and respond to potential threats, and empower them to make informed decisions about their online activities.
- International Collaboration and Standardization: Engage in international collaboration and standardisation efforts to develop common cybersecurity standards and protocols for AI technologies. This includes participating in international forums, treaties, and agreements to promote global cooperation on cybersecurity issues.
 - o **Bletchley Declaration** is one such initiative to understand the potential catastrophic harm caused by the detrimental utilisation of AI.
 - The countries that signed the agreement include China, the European Union, France, Germany, India, the United Arab Emirates, the United Kingdom and the United States.
- **Continuous Monitoring and Adaptation:** Continuously monitor the cybersecurity landscape, evaluate emerging threats, and adapt cybersecurity strategies and defences

accordingly. This includes conducting regular risk assessments, updating security protocols, and investing in ongoing training and skill development for cybersecurity professionals.

Conclusion:

• As we move towards developing more sophisticated systems and technologies, it is essential to give a sense of security in cyber domains to individuals and organisations.

9) FREE TRADE AGREEMENTS AND SIMILAR ARRANGEMENTS

(GS-II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests)

Free Trade Agreements

- Free Trade Agreements (FTAs) are **arrangements between two or more countries** or groups of countries that primarily agree **to reduce or eliminate customs tariff** and non tariff barriers on trade between them.
- FTAs normally cover **trade in goods** (such as agricultural or industrial products) or **trade in services** (such as banking, construction, trading etc).
- FTAs can also cover other areas such as intellectual property rights (IPRs), investment, government procurement and competition policy, etc.

Preferential Trade Agreement (PTA):

- In a PTA, two or more partners agree to reduce tariffs on an agreed number of products.
- The **list of products** on which the partners agree to reduce duty is called **a positive list**. In general PTAs do not cover substantially all trade.
- India-MERCOSUR PTA is such an example.
- The key difference between an FTA and a PTA is that while in a PTA there is a positive list of products on which duty is to be reduced; **in an FTA there is a negative list** on which duty is not reduced or eliminated.
- Thus, compared to a PTA, FTAs are generally more ambitious in coverage of products on which duty is to be reduced.

Comprehensive Economic Cooperation Agreement (CECA) and Comprehensive Economic Partnership Agreement (CEPA):

- These terms describe agreements which consist of an integrated package on goods, services and investment along with other areas including IPR, competition etc.
- The **India Korea CEPA** is one such example and it covers a broad range of other areas like trade facilitation and customs cooperation, investment, competition, IPR etc.

Custom Union:

- In a Customs union, partner countries may decide to trade at zero duty among themselves, however they maintain common tariffs against the rest of the world.
- An example is **Southern African Customs Union (SACU)** amongst South Africa, Lesotho, Namibia, Botswana and Swaziland.

Common Market:

- Integration provided by a Common market is one step deeper than that by a Customs Union. A common market is a **Customs Union with provisions to facilitate free movements of labour and capital, harmonize technical standards across members** etc.
- The **European Common Market** is an example.

Economic Union:

- Economic Union is a Common Market extended through further **harmonisation of fiscal/monetary policies and shared executive, judicial & legislative** institutions.
- The European Union (EU) is an example.

India-EFTA Trade deal:

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- India signed a historic trade deal, in March 2024, with the **European Free Trade Association (EFTA), comprising Iceland, Liechtenstein, Norway and Switzerland.**
- This deal named as Trade and Economic Partnership Agreement between India and EFTA is expected to give a much-needed leg-up to the low levels of extant trade between the two sides.

New Dimensions in India-EFTA Trade Deal

- **Inclusion of Environment and Labour Issues:** For the first time, India has agreed to incorporate environment and labour provisions in an FTA, which it has traditionally opposed.
- **Investment Chapter:** The India-EFTA FTA features a detailed investment chapter focusing on investment facilitation rather than protection.
- Obligation of Conduct:
 - **FDI Commitment:** EFTA countries have committed to aim to increase foreign direct investment (FDI) to India by \$50 billion within the first 10 years and an additional \$50 billion in the subsequent five years.
 - **Job Creation:** EFTA states have committed to aim to facilitate the creation of one million jobs in India.
- **Reintegration of Trade and Investment Rules:** Unlike recent FTAs with Australia, UAE, and Mauritius, which decoupled trade from investment rules, the India-EFTA FTA integrates these aspects within a single agreement.

India and FTAs:

- At present, India has the following FTAs.
 - o India-ASEAN FTA, also CECAs with Singapore and Malaysia
 - o India-Japan CEPA
 - o India-S. Korea CEPA
 - SAFTA of all SAARC countries- along with separate FTAs with Sri Lanka, Nepal, Bhutan

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- India-Mauritius CECPA
- o India-UAE CEPA, implemented in 2022
- o India-EFTA FTA, expected to be implemented in 2025.
- FTA negotiations are going on with the following countries
 - India-UK FTA.
 - o India-Canada CEPA
 - o India-Oman FTA
 - o India-Gulf Cooperation Council FTA
 - o India-European Union BTIA
 - o India-Eurasian Economic Union (EAEU) FTA

Reasons for Slow Progress in India's FTA Negotiations:

- **Agricultural Protectionism:** India's protective stance on the agricultural sector, a sensitive issue in FTAs, complicates negotiations as most FTAs leave agriculture out entirely.
- **Concerns about Chinese Goods:** India's concerns about Chinese goods flooding its markets via FTAs with third countries necessitate strong **Rules of Origin clauses**, adding complexity to negotiations.
- Intellectual Property Rights: Increasing pressure to accept more international patents as countries prioritise research and development (R&D) impacts India's negotiating stance, especially in sectors like pharmaceuticals.
- **Make In India Policy:** India's focus on promoting domestic manufacturing and self-reliance (Atmanirbhar Bharat) runs counter to the principles of free trade without subsidies, slowing negotiations.
- **Democratic Freedoms and Human Rights:** Perceived issues related to democratic freedoms, human rights, and transnational operations are becoming significant in negotiations with countries like the EU, EFTA, and Canada, causing delays.
- **Challenges to WTO:** FTAs are seen as challenges to the global economic order under the WTO, bypassing global mechanisms for free trade, leading to cautious negotiations.

What can India Do?

- **Comprehensive FTA Policy:** Develop a clear and comprehensive FTA policy that aligns with broader economic goals and strategies. This policy should integrate trade and investment negotiations, ensuring coherence and synergy in negotiations.
- Balanced Approach to Trade and Investment: Negotiate trade and investment as part
 of one comprehensive economic treaty, using each aspect to achieve desired outcomes.
 This balanced approach allows for the extraction of concessions in trade in return for offers
 on investment and vice versa.
- **Incorporate Social and Environmental Standards:** Include provisions on environmental protection, labour rights, and sustainable development in FTAs, aligning with global trade practices and sustainable development goals.
- **Enhanced Investment Protection:** Investments through FTAs should be given effective protection, including **workable dispute settlement mechanisms** under international law. Providing enforceable legal protection to foreign investors **boosts confidence** and encourages higher investment flows.
- **Promote MSME Participation:** Ensure that FTAs include provisions to facilitate the participation of **micro**, **small and medium-sized enterprises (MSMEs)** in international trade. Simplified trade procedures, capacity-building initiatives, and access to information can help SMEs benefit from FTAs.
- **Strengthen Institutional Capacity:** Build institutional capacity within government agencies responsible for negotiating and implementing FTAs. Invest in training programs,

- research, and data analysis capabilities to enhance the effectiveness of FTA negotiations and implementation.
- **Strategic Alliances and Partnerships:** Form partnerships with like-minded countries and regional groups to strengthen India's bargaining power in FTA negotiations. Collaborate on common objectives, share best practices, and coordinate positions to achieve mutually beneficial outcomes.

Conclusion:

• Free Trade Agreements are not just about tariff reductions and transactional approaches of give and take on market access or IPR, these are an outcome of mutual trust between two countries or regions, and in effect a commitment to give each other's businesses and investments domestic-like treatment.

10) ALTERNATE DISPUTE REDRESSAL MECHANISMS

(GS-II: Structure, Organization and Functioning of the Executive and the Judiciary—Ministries and Departments of the Government; Pressure Groups and Formal/Informal Associations and their Role in the Polity)

Definition:

Alternative Dispute Resolution (ADR) is a set of techniques for resolving disputes outside
of traditional court litigation, including methods like mediation, arbitration, and
negotiation, which aim to achieve amicable settlements efficiently and cost-effectively with
or without the involvement of neutral third parties.

Need for ADR in India:

- **Judicial Backlog:** Courts in India have a huge number of pending cases, leading to delays in trial and justice. As of December 2023, there were around **five crore cases pending** in various courts of the country.
- **Lengthy Court Procedures:** The procedures in courts are **lengthy and time-consuming,** which adds to the delay in case resolution. The average time for disposal of a case in High Courts is around 4 years and in subordinate courts is around 6 years.
- **Expensive Litigation:** The traditional court system is very expensive, involving court fees, lawyers' fees, and other associated costs, making it unaffordable for many people.
- Accessibility for the Poor and Illiterate: A large number of people in India are illiterate and poor, who find the court system too technical, lengthy, and expensive. ADR offers a simpler and more accessible alternative.
 - o Parties in ADR can choose the date, place, and fee for the neutral third party by mutual consent, making the **process more convenient.**
- **Reducing Court Burden:** Relieving courts from the heavy burden of petty cases allows them to focus on more serious cases, especially those involving heinous crimes.
- **Government Expenses:** Litigation increases the operational expenses of courts, which are funded by money. Reducing the number of cases through ADR can help in reducing these costs.
- **Preserving Relationships:** Litigation often harms relationships and causes emotional stress to the litigants. ADR provides a more amicable way to resolve disputes, preserving relationships.
- **Flexibility and Efficiency:** ADR proceedings are flexible. Parties can choose the applicable law, conduct proceedings in any manner and language they agree upon, and settle matters in fewer meetings, thereby reducing expenses and time.

Techniques of ADR:

• Among the various techniques of ADR, **Conciliation, Mediation and Arbitration** are the important ones.

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Conciliation:

- 'Conciliation' is a process in which a third party assists the parties to resolve their dispute by agreement.
- The person assisting the parties is called a Conciliator. The Conciliator is appointed by the consent of both the parties to the dispute.
- The **Conciliator does not take any decision** on the dispute before him/her but he/she may express an opinion about the merits of the dispute to the parties.
- Both the parties may discuss their respective points of view and with the help of the Conciliator to resolve their differences.
- Conciliation is a **voluntary and non binding process** in comparison to Arbitration and Litigation in courts.
- Any party may terminate the conciliation proceedings at any time without assigning any reason. The other important difference is that the parties control the process and outcome of the dispute.

Mediation:

- 'Mediation' is a process for **resolving the dispute with the aid of an independent third person** that assists the parties in dispute to reach a **negotiated resolution**.
- The person conducting the mediation process is called a **Mediator**. The mediation process, like the Conciliation process, is **voluntary** and is one more alternate way of resolving a dispute.
- A **Mediator** assists the parties to reach an agreement for resolving the dispute. He/ She **does not express** his/ her **opinion on the merits of the dispute.**
- His/her function is only to try to break any deadlock and encourage the parties to reach an amicable settlement. A Mediator does not determine a dispute between parties.

Arbitration:

- Where two or more persons agree that a dispute or potential dispute between them shall be decided in a legally binding way by one or more impartial persons in a judicial manner, that is, after recording evidence, the agreement is called an Arbitration Agreement.
- When such a dispute has arisen and is put before those impartial persons, the **procedure is** called Arbitration. The decision made in the arbitration is called an "award".
- The person conducting the Arbitration proceeding is called an Arbitrator. The arbitrator hears the **merits of the case** and imposes the awards on the parties.
- 'Award' of the Arbitrator is **binding** on the parties and may be enforced by the Courts. There is **no appeal** against the Award.

Government Measures for promoting ADR:

- Legal Framework Establishment:
 - Section 89, Civil Procedure Code, 1908 recognizes and provides for Arbitration, Conciliation, Mediation, and Judicial Settlement, including Lok Adalat, as modes for dispute resolution.
 - Mediation Act, 2023 enables courts to refer disputes to mediation and sets a legislative framework for mediation.
 - Arbitration and Conciliation Act, 1996 was enacted to consolidate and amend the law relating to domestic and international arbitration and enforcement of foreign arbitral awards. It was amended in 2015, 2019, and 2021 to promote expeditious, cost-effective, and institutional arbitration while minimising judicial intervention.
 - Commercial Courts Act, 2015 amended in 2018 to introduce Pre-Institution Mediation and Settlement (PIMS) for specified commercial disputes, mandating mediation before approaching courts.

- India International Arbitration Centre (IIAC) was established under the India International Arbitration Centre Act, 2019, to provide world-class arbitration services and facilities for domestic and international disputes.
- Lok Adalats were promoted under the Legal Services Authorities (LSA) Act, 1987, to settle disputes amicably at pre-litigation and court-pending stages. Awards from Lok Adalats are binding and deemed as civil court orders.

Problems Faced in Using Alternative Dispute Resolution Mechanisms

- Lack of Awareness and Acceptance: Many people, including legal professionals and the general public, may be unaware of or have **misconceptions** about the benefits and processes of ADR mechanisms. This can lead to reluctance in choosing these options over traditional litigation.
- **Insufficient Training:** Mediators and other ADR professionals often require **specialised skills** that go beyond typical legal training. The current requirements for mediators to have extensive professional experience can create **barriers to entry** and a lack of adequately trained mediators.
- **Legal and Institutional Barriers:** Existing legal frameworks and institutional practices may not fully support or integrate ADR mechanisms. For example, the enforceability of mediated agreements can sometimes be unclear or cumbersome.
- **Cost and Accessibility:** Although ADR is often seen as a cost-effective alternative to litigation, the costs associated with hiring skilled mediators or arbitrators can still be prohibitive for some parties. Additionally, accessibility issues can arise, especially in remote or rural areas.

Measures to Address Problems in Alternative Dispute Resolution

- **Enhancing Awareness and Education:** Conducting awareness campaigns and educational programs to inform both the public and legal professionals about the benefits and processes of ADR.
- Improving Training and Certification: Developing comprehensive training programs for mediators and arbitrators, including co-mediation and shadow mediation techniques. Certification processes and inclusion in the degree curriculum can ensure that ADR professionals are well-equipped with the necessary skills and knowledge.
- **Government's shift to Mediation:** The Governments at Union and state levels are involved in about 40% of the litigations. The Government can try to settle its disputes through ADR. ADR Centers (especially mediation centres) can be set up in different government departments.
- **Standardising Practices and Procedures:** Establishing clear guidelines and standards for ADR processes to ensure consistency and reliability. This includes **creating uniform procedures** for mediation and arbitration that can be adopted nationwide.
- **Strengthening Legal Frameworks:** Ensuring that the legal system supports ADR mechanisms through clear laws and regulations. This includes making mediated agreements easily enforceable and integrating ADR processes more seamlessly into the judicial system.

Way Forward:

• **Justice DY Chandrachud,** Chief Justice of India, gave this **slogan: 'Mediate and not litigate'.** ADR mechanisms can help in increasing the accessibility of timely justice for different sections of the Indian society.

11) INDIA-NEPAL RELATIONS

(GS-II: India and its Neighborhood- Relations)

Background:

- As close neighbours, India and Nepal share unique ties of friendship and cooperation characterised by an open border and deep-rooted people-to-people contacts of kinship and culture.
- There has been a long tradition of free movement of people across the border. Nepal shares a border of over 1850 km with five Indian states Sikkim, West Bengal, Bihar, Uttar Pradesh and Uttarakhand.

Factors leading to strong bond between India and Nepal:

- **Shared Heritage:** India and Nepal share a rich cultural heritage rooted in Hinduism and Buddhism, with significant religious sites such as Lumbini (Buddha's birthplace in Nepal) and Varanasi (a major Hindu pilgrimage site in India).
- **Historical Connections:** The peoples of the two countries have had historical interactions through trade, migration, and cultural exchange over centuries.
- Treaty of Peace and Friendship (1950): The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal. Nepalese citizens avail facilities and opportunities on par with Indian citizens in accordance with the provisions of the Treaty. Nearly 8 million Nepalese citizens live and work in India.
- **Trade and Investment:** India is Nepal's largest trade partner and a major source of foreign investment. Bilateral trade value is around US\$ 10 billion.
- **Development Aid:** India has been a significant contributor to Nepal's development, providing aid for infrastructure projects, education, healthcare, and capacity building.
 - Since 2003, India has taken up over 550 High Impact Community Development Projects (HICDPs) in Nepal and has completed 488 projects in the areas of health, education, drinking water, connectivity, sanitation, and the creation of other public utilities across all 7 provinces of Nepal at the grassroots level.
- **Border Security:** With an **open border**, both countries cooperate closely on border management to combat cross-border crime and ensure mutual security.
- Power sector Development: Nepal's vast hydropower potential presents opportunities for both countries. Joint ventures and agreements aim at harnessing these resources to meet energy needs.
 - o In Energy Sector, the cooperation that begun with Trishuli Hydropower Projects, Pokhara Hydropower projects, Kataiya Power house and Devigh at Hydroelectric project has further developed with commissioning of Motihari-Amlekhgunj Petroleum Pipeline in 2019, first cross-border petroleum product pipeline in the South Asia region
- **Water Sharing Agreements:** Rivers flowing between the two nations necessitate cooperative management and usage agreements to prevent and resolve disputes over water resources.
- **Social and People-to-People Contacts:** Scholarships, educational exchanges, and cultural programs enhance mutual understanding and strengthen social ties.

Challenges in India's relations with Nepal:

- **Kalapani-Lipulekh-Limpiadhura Border Dispute:** This region, covering about 372 square kilometres, is claimed by both India and Nepal. In 2024, Nepal released a new political map incorporating this territory, which escalated tensions.
 - o In 2024, Nepal had decided to come out with a Rs-100 currency note that depicts the country's map with the areas under Indian control, leading to fresh tensions.

- **China's Growing Presence:** Nepal's increasing engagement with China, including significant investments and infrastructure projects under the Belt and Road Initiative (BRI), is a concern for India. China pledged \$500 million in aid to Nepal in 2019, highlighting its growing influence.
- **Trade Deficit:** Nepal's trade deficit with India is substantial. In 2022, Nepal imported goods worth about \$8 billion from India while exporting only about \$1.1 billion, leading to a trade deficit of nearly \$6.9 billion.
- Border Blockades: In 2015, an unofficial blockade along the India-Nepal border caused severe shortages of essential goods like fuel and medicine in Nepal. Nepal accused India of supporting the blockade due to political disagreements, significantly straining bilateral relations.
- **Internal Politics:** Nepal's internal political dynamics often influence its relations with India. For instance, during the 2015 constitutional crisis, different political factions in Nepal had varying stances towards India, affecting bilateral cooperation.
- **Perceived Interference:** Many in Nepal perceive India's involvement in its internal affairs as excessive. A 2020 survey indicated that around 43% of Nepalis viewed India's influence in Nepal's politics as negative.
- **Cross-Border Terrorism and Crime:** The 1,751-kilometre-long open border is sometimes exploited for **smuggling**, **human trafficking**, **and movement of insurgents**, posing security challenges for both countries.
- Water Sharing Issues: Disputes over water-sharing agreements and the construction of
 dams and barrages on shared rivers have been contentious. For example, the Mahakali
 Treaty (1996) for sharing the Mahakali River's waters has faced implementation issues.
- **Hydropower Projects:** Joint hydropower projects, such as the **Pancheshwar Multipurpose Project**, often face **delays and disputes** over investment, revenue sharing, and environmental impact, affecting progress and trust.
- **Delay in Implementing Agreements:** Delays and bureaucratic hurdles in implementing bilateral agreements and projects can lead to frustration. For instance, the Raxaul-Kathmandu rail project, agreed upon in 2018, has seen slow progress.

Solutions to develop India-Nepal relations:

- **Respect for Nepal's Sovereignty:** India should respect Nepal's decisions on its internal political affairs. By avoiding interference, India can help ensure a positive bilateral relationship. India should continue its policy of non-interference while quietly supporting stability and development.
- **Holistic Development Road Map:** India could propose a development agenda similar to its initiatives like the "**Neighbourhood First Policy**," which includes investments in infrastructure, health, and education.
- **Economic Cooperation:** Strengthening economic ties through investments and trade agreements. For instance, India is Nepal's largest trade partner, accounting for over 65% of Nepal's total trade volume in 2022. Enhancing trade infrastructure and reducing trade barriers can further boost economic cooperation.
- **Responding to Demographic Needs:** Initiatives like the "Skill India" program can be extended to **Nepal to address youth unemployment.** Collaborative projects in education and vocational training can prepare Nepal's young population for better job opportunities.
- **Social and Cultural Ties:** Promoting cultural exchanges, such as the annual India-Nepal Folk Crafts Festival, and leveraging shared heritage sites like Lumbini, the birthplace of Buddha, can strengthen ties. Over 1.4 million Indian tourists visited Nepal in 2019, highlighting the potential for tourism collaboration.

- Utilising soft power tools like educational scholarships (e.g., over 3,000 scholarships provided to Nepalese students annually by the Indian government) and cultural exchanges to build goodwill and mutual understanding.
- **Security and Intelligence Cooperation:** Strengthening cooperation to combat security threats. The **joint military exercise "Surya Kiran"** is an example of successful security collaboration. Such exercises can help both countries address cross-border smuggling and terrorism.

Conclusion:

• Clear and consistent communication between India and Nepal through appropriate channels can help in developing relations. A relationship based on equality should be fostered by both the stakeholders for the welfare of the entire region.

12) INDIA-US RELATIONS

(GS-II: Effect of Policies and Politics of Developed and Developing Countries on India's interests, Indian Diaspora)

Background:

- India and the United States enjoy a comprehensive global strategic partnership covering almost all areas of cooperation, driven by shared democratic values, convergence of interests on a range of issues, and vibrant people-to-people contacts.
- The relationship is based on the strong foundations of commitment to democracy and rules based international order.
- From the period of mistrust in the pre 1991 years, both the countries have come together to create a mutually beneficial relationship.

Social and Economic Relationship:

- The value of **bilateral trade** between the countries stands at **US \$ 191.43 Bn (2022)**, with the **balance of trade in India's favour**.
 - Indian exports were valued at US \$ 118.5 Bn and US exports were valued at US \$ 72.9 Bn in the same period.
- About **4.4 million Indian Americans/Indian** origin people **reside** in the US and in this around **2.8 million Persons of Indian origin** have become naturalised citizens in the US.
- The U.S. is one of the most favoured destinations of **Indian students** for higher education. As of September 2023, there are **320,260 Indian students**, mostly in graduate (Masters) programs.
- Programs highlighting Indian cultural heritage and initiatives such as International Day of Yoga, International Year of Millets, Mission LiFE, Ayurveda day are organised with participation of Indian Diaspora and Friends of India.

Defence Cooperation:

- In 2016, India was designated as a **Major Defence Partnership (MDP)** of the US.
- **Important defence agreements** which provide the framework for interaction and cooperation are:
 - o **GSOMIA** (General Security of Military Information Agreement) was the first of the foundational agreements to be signed in 2002 which essentially guaranteed that the two countries would protect any classified information or technology that they shared.
 - o **LEMOA:** Logistics Exchange Memorandum of Agreement (2016);
 - COMCASA: Communications Compatibility and Security Agreement (2018);
 Industrial Security Agreement (2019); and
 - o **BECA:** Basic Exchange and Cooperation Agreement (2020).

- **Defence Exercises:** India has the largest number of military exercises with the USA, which are growing in scale and complexity. Important bilateral exercises include **Yudh Abhyas** (Army), Vajra Prahar (Special Forces), Cope India (Air Force), and Tiger Triumph (triservices).
- **Defence procurements** from the USA are growing and amount to almost US\$20 billion. Major US-origin platforms in use include C-130J, C-17, Apache, Chinook, MH60R helicopters and P8I.
- The **India-US Defence Acceleration Ecosystem (INDUS X)**, a network of universities, incubators, corporates, think tanks, and private investment stakeholders was launched to further the defence cooperation.

Science and technology Cooperation:

- In 2008, India and the USA signed the "Agreement for Co-operation between the Government of India and the Government of the United States of America concerning Peaceful Uses of Nuclear Energy", which ended technology denial regimes against India that have been in place for three decades and ended India's nuclear isolation.
 - o It opened the doors for India to have civil nuclear cooperation as an equal partner with the USA and the rest of the world.
 - o This agreement gave India a **full waiver** in the **Nuclear Security Group (NSG)** to access its partners without signing the **Nuclear Test Ban Treaty (NPT)**.
- India and the U.S. have a **long history of cooperation** in the civil space arena in Earth Observation, Satellite Navigation, Space Science and Exploration.
- Indian Space Research Organization (ISRO) has robust civilian space cooperation with the US National Aeronautics and Space Administration (NASA); National Oceanic and Atmospheric Administration (NOAA); US Geological Survey (USGS) and academic institutions.
- ISRO and NASA are developing a microwave remote sensing satellite for Earth observation, NASA-ISRO Synthetic Aperture Radar (NISAR).

Recent Challenges in India-US relations:

- **Tariffs and Trade Barriers:** Both countries have imposed tariffs on each other's goods. The US has raised concerns over India's high tariffs and trade barriers, while India has objected to US tariffs on steel and aluminium.
 - Generalised System of Preferences (GSP): The US terminated India's designation as a beneficiary developing country under the GSP program, affecting duty-free access for certain Indian goods.
- **Data Localization:** India's push for data localization laws, which require data to be stored locally, has been a contentious issue. US tech companies have opposed these regulations, arguing that they create barriers to digital trade.
- **Human Rights and Democratic Values:** The US has expressed concerns over human rights issues in Kashmir, especially following India's revocation of Article 370, which granted special autonomy to the region.
 - Citizenship Amendment Act (CAA): The CAA and the proposed National Register of Citizens (NRC) have been criticised internationally, including by some US lawmakers and human rights organisations, for discriminating against Muslims.
- **Defence and Security:** India's emphasis on strategic autonomy sometimes leads to divergences in foreign policy, particularly **regarding Russia and Iran,** which complicates its partnership with the US.
- **Climate Policy:** Differences in climate policy approaches and commitments have occasionally caused friction, although both countries have recently sought to cooperate more closely on climate action.

- **IPR Issues and Pharma Pricing:** The US has often criticised India's intellectual property regime, especially concerning pharmaceuticals, arguing that it does not provide adequate protection for US companies.
 - o India's regulation of drug prices and compulsory licensing for essential medicines have been points of dispute.
- **H-1B Visa:** Changes in the US H-1B visa program, which many Indian IT professionals rely on, have caused concern in India. Restrictions and uncertainties around these visas affect the Indian IT sector and professionals.
- **Sikh Separatism issue:** The US Department of Justice **filed a case in a federal court** in New York saying that it had unearthed a plot to kill a US national on American soil.
 - o **India is concerned** with the inability of the US to take action against those responsible for the **attack on the Indian consulate in San Francisco** and openly letting separatist Sikhs organise and propagate anti-India and **Khalistani movements** in the country.

Way Forward:

• While India's embrace with the U.S. is getting stronger, deeper and more comprehensive, India is also aware of the need to maintain its strategic autonomy. India's desire to protect its borders and sovereignty aligns with U.S. interests (against China). This is a new era of mutual trust between the two countries, and it should act as a force for stability in the region.

13) HYPERTENSION- THE SILENT KILLER

(GS-II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources)

Background:

- Hypertension, or high blood pressure, is a critical public health issue that often doesn't receive the attention it deserves.
- Hypertension is a medical condition characterised by consistently elevated blood pressure levels, increasing the risk of heart disease, stroke, and kidney problems due to excessive force against artery walls.
- Over the last three decades, the number of adults with hypertension has nearly doubled to 1.3 billion, with **nearly half unaware of their condition.**
- **In India,** the situation is particularly alarming, with **311 million adults** (about one in three) suffering from hypertension, more than those with diabetes.

Causes for Hypertension:

- **Genetics:** Family history of hypertension.
- **Unhealthy Diet:** High salt intake, excessive consumption of processed foods.
- **Obesity:** Excess body weight increases the strain on the heart.
- Lack of Physical Activity: Sedentary lifestyle contributes to high blood pressure.
- Excessive Alcohol Consumption: Regular heavy drinking can raise blood pressure.
- **Smoking**: Tobacco use increases blood pressure and damages blood vessels.
- **Stress:** Chronic stress can contribute to hypertension.
- **Ageing:** Blood pressure typically increases with age.
- **Medications:** Certain prescription drugs can raise blood pressure.

Strategies for Prevention and Control:

- To combat this silent killer, the Indian government has initiated measures like the **India Hypertension Control Initiative (IHCI)** 2017, which aims to provide standardised care to 75 million people with hypertension or diabetes by 2025.
- **Raising Awareness:** Public awareness campaigns are essential to educate people about the risks and long-term impacts of untreated hypertension.

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- **Focusing on Non-Modifiable Risk Factors:** Initiatives should also address individuals with non-modifiable risk factors like family history, age, and existing comorbidities.
- **Reducing Salt Intake:** Strategies like the **WHO's SHAKE initiative** can help reduce dietary salt consumption through measures such as better food labelling, industry reformulation of food products, and public education.
- **Multi-Sectoral Actions:** A comprehensive approach involving various sectors is necessary for the prevention and control of non-communicable diseases.
- **Improving Regulation:** Enhanced food labelling and stronger enforcement of food regulations can help consumers make informed choices and reduce their intake of high-salt foods.
- **Promoting Regular Blood Pressure Checks:** Encouraging regular blood pressure monitoring in public places, workplaces, and during healthcare visits can help early detection and management of hypertension.

Conclusion:

These measures can help in reducing the damage caused by Hypertension. Along with it, the
focus should be on the whole range of lifestyle diseases. Successful models like IHCI
should be expanded and adapted to control other lifestyle diseases such as diabetes and
chronic kidney disease.

14) GREEN GROWTH

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Definition:

- Green growth refers to promoting economic growth and development while ensuring
 that natural resources continue to provide the environmental services and resources on
 which our well-being relies.
- It focuses on reducing carbon emissions, increasing energy efficiency, and fostering sustainable practices in industries and communities.
- The aim is to achieve a balance between economic development and environmental sustainability, ensuring long-term ecological health and prosperity.

Hurdles to Green Growth

- **Technological Risks and Costs:** Transitioning to green technologies can be costly and technologically challenging, especially for sectors that are heavily reliant on fossil fuels such as power, steel, and cement.
 - Industries such as steel, cement, and chemicals have inherent processes that produce high levels of carbon emissions, making it difficult to reduce their carbon footprint without significant technological advancements.
- **Investment Requirements:** Significant capital investment is required for renewable energy (RE) projects, energy storage systems, carbon capture utilisation and storage (CCUS), and green hydrogen infrastructure.
- **Regulatory and Policy Uncertainty:** Inconsistent or unclear policies and regulations can deter investment in green technologies and hinder progress toward green growth.
- Market and Demand Risks: Market fluctuations and uncertain demand for green products and technologies can create financial risks for businesses investing in green transitions.
- **Infrastructure Limitations:** The existing infrastructure may not be adequate to support the widespread adoption of renewable energy sources and green technologies.
- **Intermittent Renewable Energy Supply:** The variability in energy generation from renewable sources like wind and solar presents a challenge for ensuring a reliable, round-the-clock power supply.

Government Initiatives for Green growth:

- **Production-Linked Incentive (PLI)** Scheme for Renewable Energy has been started to boost domestic manufacturing of high-efficiency solar modules.
 - Financial incentives are given for manufacturers based on the sales of solar modules produced.
- **Viability Gap Funding (VGF)** Schemes have been started to support the development of **offshore wind** and battery storage projects.
- Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME) Scheme to promote the adoption of electric vehicles (EVs) to reduce carbon emissions from the transport sector.
 - Subsidies and incentives are given under the scheme for the purchase of electric vehicles and development of EV infrastructure.
- **National Green Hydrogen Mission** to promote the production and usage of green hydrogen as a clean energy source.
 - o Through this scheme, support is given for the development of green hydrogen production facilities and its application in refining, chemical, and fertiliser sectors.
- **Energy Conservation (Amendment) Bill** is proposed to strengthen the **legal framework** for energy conservation and promote energy efficiency. It aims to have enhanced mandates for energy audits and certification of energy managers.
- **Green Bonds** help to **mobilise resources** for green infrastructure projects.
- **Renewable Purchase Obligations (RPOs)** mandate the procurement of a certain percentage of energy from renewable sources by **power distribution companies.** This aims to encourage the development and integration of renewable energy into the national grid.
- The National Action Plan on Climate Change (NAPCC) outlines India's strategy to address climate change and promote sustainable development. This includes missions focused on solar energy, enhanced energy efficiency, sustainable agriculture, water conservation, and more.
- Carbon Capture, Utilisation, and Storage (CCUS) Initiative to mitigate carbon emissions from hard-to-reduce sectors like steel and cement. Funding and policy support is given for the development and implementation of CCUS technologies.
- Sustainable Alternative Towards Affordable Transportation (SATAT) to promote the use of compressed biogas (CBG) as an alternative fuel.

Further Measures required for Green Growth:

- **Investment in Research and Development:** Increase funding for research and development in green technologies **to drive innovation** and reduce costs over time.
 - Support pilot projects and the commercialization of new technologies through grants and public-private partnerships.
- **Infrastructure Development:** Invest in **upgrading and expanding infrastructure** to support renewable energy, including grid enhancements, energy storage systems, and transmission capabilities.
 - Develop hybrid renewable energy projects that combine different sources (e.g., wind and solar) to ensure a more stable and reliable power supply.
- **Stakeholder Engagement and Collaboration:** Develop collaboration between government, industry, and academia to create a supportive ecosystem for green growth.
 - Engage stakeholders in the development of green policies and initiatives to ensure they are **feasible** and widely supported.
 - o Promote industries to shift in a voluntary manner to green technologies which can increase their **reputation** and improve their **market performance**.

- **Public Awareness and Education:** Increase public awareness about the benefits of green growth and the importance of sustainable practices.
 - Educate businesses and consumers on the advantages of green products and technologies to drive market demand.

Conclusion:

• India is the third-largest carbon-emitting country and one of the most vulnerable to the effects of global warming. Enhancing government initiatives with these measures help in our path towards green growth.

15) PARA DIPLOMACY

(GS-II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests)

Definition:

- Para diplomacy, also known as sub-state diplomacy, refers to the formal interactions and
 engagements between entities below the national level, such as regional or local
 governments, with foreign entities or governments, typically in pursuit of shared
 national goals or interests.
- It involves subnational actors engaging in diplomatic activities that are usually the prerogative of national governments.

Significance of Para diplomacy:

- **Diversification of Diplomatic Channels:** Para diplomacy enables a more diverse range of actors to engage with foreign entities, leading to nuanced and context-specific approaches to international relations.
- **Promotion of Regional Interests:** Subnational governments can advocate for and promote their specific interests on the global stage, ensuring that local perspectives are considered in foreign policy decisions.
- **Enhanced Economic Cooperation:** Para diplomacy facilitates economic cooperation and trade partnerships with foreign regions or countries, leading to increased investment, trade, and economic growth at the regional level.
 - Events like Vibrant Gujarat, engaged in para diplomacy with UAE, attracting significant investments to the state and boosting its infrastructure and industries.
- **Cultural and Educational Exchanges:** Para diplomacy often involves cultural and educational exchanges between regions or cities across borders, fostering understanding between different cultures and enhancing soft power.
 - Tamil Nadu's engagement with Sri Lanka has included efforts to address the rights of Tamils in Sri Lanka, influencing India's foreign policy towards Sri Lanka and promoting cultural ties between the two regions.
- **Conflict Resolution and Peacebuilding:** Subnational entities engaging in para diplomacy can contribute to conflict resolution and peacebuilding efforts, especially in regions with historical or ongoing conflicts.

Conclusion:

• India has seen varied issues due to cross-border ties among people and their separation due to border demarcation. This demands the construction of a consensus between the Centre and the State governments in the border provinces on developing a productive relationship with the neighbours.

16) RUSSIA-CHINA RELATIONS AND ITS IMPACT ON INDIA

(GS-II: Effect of Policies and Politics of Developed and Developing Countries on India's interests, Indian Diaspora)

Background:

- **19th Century Expansion of Czarist Russia:** Czarist Russia expanded into weak Chinese territories, establishing a presence in the Pacific region. This expansion continued under the Soviet Union, maintaining control over these areas.
- **Post-1949 Communist Brotherhood:** Following the establishment of the People's Republic of China (PRC) in 1949, a decade of friendship ensued between China and the Soviet Union, rooted in their shared Communist ideologies.
- 1960s Ideological and Geopolitical Divergence: The alliance was disrupted by the Sino-Soviet split, exacerbated by ideological differences and geopolitical conflicts, including the Chinese attack on India in 1962 and armed clashes over the Ussuri River in 1969.
- 1972 Onward Tilt Towards the West: U.S. President Richard Nixon's visit to Beijing in 1972 marked a significant shift, as China began tilting towards the West, which supported its modernization under Deng Xiaoping. This period saw reduced Sino-Russian ties as China sought Western investment and technology, transforming into a global economic powerhouse.
- Post-2012 Renewed Partnership: Alarmed by U.S. policies aimed at containing its rise, China re-established stronger ties with Russia. The 2022 Beijing Summit solidified their "No Limits" partnership, driven by mutual opposition to the West, especially following Russia's invasion of Ukraine and subsequent Western sanctions.
 - o In the previous partnerships, Russia was the stronger partner but now, China is the stronger one.

Impacts on India's Interests

- **Defence Dependency:** India's significant **reliance on Russia** for defence supplies could be compromised if Russia becomes more economically and politically dependent on China. Chinese influence might pressure Russia in ways that could affect its reliability as a defence partner for India.
- **Border Tensions:** The strengthening of Sino-Russian ties poses a strategic challenge for India, which has **ongoing border tensions with China.** Enhanced Sino-Russian military cooperation could tilt the regional power balance, potentially disadvantaging India.
- **Economic Considerations:** With both China and Russia under Western sanctions, their increased economic collaboration could create new regional dynamics. India must navigate these changes while ensuring its own economic interests and maintaining balanced trade relations with all the partners.
- **New Geopolitical Strategy:** The evolving Sino-Russian relationship necessitates a recalibrated Indian foreign policy. India must leverage its **strategic autonomy** and adopt a practical approach to safeguard its national interests in this shifting geopolitical landscape.
- **Technological and Economic Competition:** As China and Russia potentially collaborate more closely on technology and economic projects, **India must enhance its capabilities** and alliances to remain competitive. This includes fostering innovation, securing strategic partnerships, and investing in critical technologies.

Way Forward:

• In this new Cold war like situation, India should use its strengths judiciously, and adopt a sharper approach. As new opportunities arise, it needs to be clear-headed about its core long-term national goals, adopt a suitable strategy and follow it with a steady path.

17) INDIA-IRAN RELATIONS

(GS-II: Effect of Policies and Politics of Developed and Developing Countries on India's interests, Indian Diaspora)

Background:

- India and Iran share a history of interactions spanning for thousands of years, fostering a deep cultural and civilizational connection.
- **1950 Friendship Treaty** marked the formalisation of post-independence diplomatic relations between India and Iran.
- **Tehran Declaration (2001)** signed during Prime Minister Atal Bihari Vajpayee's visit, outlining strategic cooperation.
- **New Delhi Declaration (2003)** was signed during President Seyyed Mohammad Khatami's visit, further strengthening bilateral cooperation.
- **Chabahar Port Development:** Memorandum of Understanding (MoU) was signed in 2015 to develop the Shahid Beheshti Port at Chabahar as a major regional and international hub.
 - It will serve as an easy route for India to reach Afghanistan and Central Asia bypassing Pakistan.
- India is one of Iran's top five trade partners.
 - o India-Iran bilateral trade during the FY 2022-23 was \$2.33 billion, with **trade** balance in India's favour.
 - Major Indian exports to Iran: rice, tea, sugar, pharmaceuticals, man made staple fibres, electrical machinery, artificial jewellery.
 - Major Indian imports from Iran: dry fruits, inorganic/organic chemicals, glassware.

Recent Challenges in India-Iran relations:

- **US Sanctions and Geopolitical Tensions:** The US re-imposition of sanctions on Iran has made it difficult for India to engage economically, particularly in the energy sector.
 - The US has also expressed opposition to the revival of the Chabahar port project, complicating India's strategic interests in the region.
 - The sanctions led to the suspension of Indian crude oil imports from Iran, disrupting a major aspect of their economic relationship. Bilateral trade figures have started falling after this process.
- **Regional Security Dynamics:** India's growing ties with Israel and Gulf countries like **Saudi Arabia and the UAE**, bolstered by initiatives like the **I2U2 grouping**, have strained relations with Iran, which views these developments as part of a broader US strategy to counter Iranian influence.
 - o **I2U2** is a partnership between India, Israel, the UAE, and the U.S. which identifies bankable projects and initiatives to tackle some of the greatest challenges confronting our world, with a particular focus on joint investments and new initiatives in water, energy, transportation, space, health, food security, and technology.
- Connectivity Projects: The starting of the India-Middle East-Europe Economic Corridor (IMEC) which aims to connect India and Europe bypassing Iran with US's support creates hurdles in India's relationship.
- **Political Uncertainty in Iran:** The recent death of Iranian President Ebrahim Raisi has added uncertainty, although the Supreme Leader remains the ultimate authority. This political instability can affect bilateral projects and agreements.

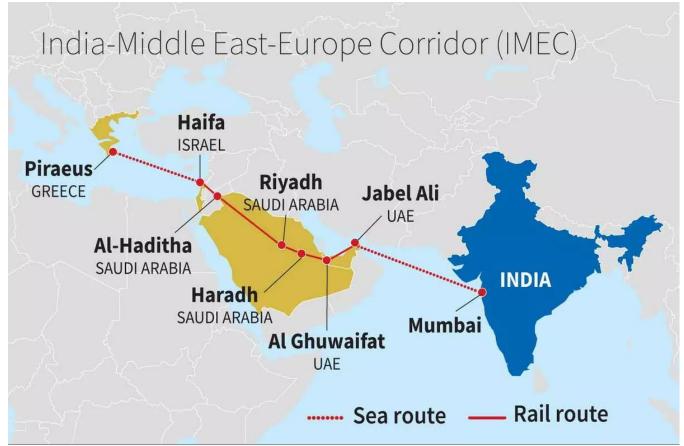
Way Forward:

• India's relationship with Iran over the recent years has been affected by the activities of global powers, especially the USA. In this situation, India should take efforts to develop a consistent and broad based relationship with Iran with limited external influence.

18) INDIA-MIDDLE EAST-EUROPE CORRIDOR (IMEC)

(GS-II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests)

What is IMEC?



- On the sidelines of the G20 Leaders' Summit (Sept. 2023), leaders of India, European Union, France, Germany, Italy, Saudi Arabia, UAE and US announced an MOU committing to work together to develop a new India-Middle East-Europe Economic Corridor (IMEC).
- The IMEC will comprise two separate corridors,
 - o the east corridor connecting India to the Gulf and
 - o the northern corridor connecting the Gulf to Europe.
- The corridor will provide reliable and cost-effective **cross-border ship to rail transit networks to supplement existing maritime routes.**
- It intends to increase efficiency, reduce costs, secure regional supply chains, increase trade accessibility, enhance economic cooperation, generate jobs and lower greenhouse gas emission, resulting in a transformative **integration of Asia, Europe and the Middle East (West Asia).**

Significance For India:

- **Enhanced Connectivity:** IMEC offers a direct overland and maritime route connecting India to Europe, bypassing the Suez Canal, which significantly reduces the distance, time, and cost of trade.
 - The corridor also strengthens India's ties with Middle Eastern countries, fostering better economic and political relations.
- **Economic Benefits:** It is estimated that IMEC will **reduce the time and cost of transporting goods to Europe from India by 40% and 30%,** respectively, making Indian exports more competitive.

- Strategic Counter to BRI: IMEC serves as a strategic counter to China's Belt and Road Initiative (BRI), enhancing India's geopolitical influence in the region and providing an alternative trade route that diversifies India's connectivity options.
- **Infrastructure Development:** The development of a reliable cross-border **ship-to-rail transit network** and related infrastructure enhances India's domestic logistics capabilities.
 - Along with the transport network, laying of cables for electricity, digital connectivity, and a pipeline for clean hydrogen export, supports India's infrastructure modernization and energy security goals.
- **Regional Stability and Security:** Participation in the IMEC project can justify a stronger Indian naval and military presence in the region, ensuring the protection of trade routes.
- **Economic Integration:** Enhanced economic ties with Middle Eastern and European countries can contribute to regional stability and security, reducing the likelihood of conflicts that disrupt trade.

Conclusion:

• The IMEC is a futuristic and path-breaking initiative. This being blocked by the Gaza war, can lead to understanding about its shortcomings and help to add a layer of insurance to this ambitious project.

19) DEEP FAKES

(GS-III: Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Biotechnology and issues relating to Intellectual Property Rights)

Definition:

• Deep fakes are **images or recordings** that have been **convincingly altered and manipulated** using artificial intelligence to misrepresent someone as doing or saying something that they did not actually do or say.

Impacts of Deep fakes on Indian Politics:

- **Misinformation and Manipulation:** Deep fakes can be used to spread false information, manipulate public opinion, and create confusion among voters.
- **Character Assassination:** Politicians can be falsely portrayed in compromising situations, damaging their reputations and influencing voter perceptions.
- **Erosion of Trust:** The presence of deep fakes can erode trust in authentic media and information sources, leading to a general lack of trust of all digital content.
- **Election Interference:** Deep fakes can be deployed to disrupt the electoral process by creating fake speeches or actions attributed to candidates, potentially altering the outcome of elections.
- **Polarisation and Conflict:** By spreading divisive and inflammatory content, deep fakes can exacerbate social and political divisions.

Measures Available to Address the Problem in India:

- Indian Penal Code (IPC):
 - o **Section 468:** Addresses forgery of a document or electronic record for cheating.
 - **Section 505:** Pertains to the making, publishing, and circulation of statements, rumours, or reports to cause fear or alarm to the public.
 - o **Section 416:** Criminalizes cheating by personation.
- Information Technology Act, 2000:
 - Section 66(c): Punishes sending electronic mail or messages for causing annoyance, deception, or misleading the recipient with imprisonment up to three years.
 - Sections 66 and 67: Punish cheating by personation, violation of privacy, and transmission of visual images or publication of private images with imprisonment up to three years.

• Election Commission of India (ECI) can issue advisories for the responsible and ethical use of social media in election campaigning. It also ordered political parties to remove fake content within three hours of it coming to their notice.

Solutions to Address the Problems of Deep Fake:

- **Legal Reforms:** Develop and implement **new laws specifically** targeting the creation and dissemination of deep fakes. These laws should include stringent penalties for creating and sharing deep fakes that aim to manipulate electoral outcomes or harm individuals' reputations.
- Technological Solutions:
 - o **AI Detection Tools:** Invest in advanced AI technologies that can detect and flag deep fakes quickly and accurately.
 - Digital Watermarking: Use digital watermarks and blockchain technology to verify the authenticity of videos and images.
- **Strengthening Election Monitoring**: Enhance the capabilities of election monitoring bodies to identify and respond to the use of deep fakes in real-time during election periods. This could involve setting up special task forces dedicated to monitoring digital content for misinformation and deep fakes.
- **Collaboration with Tech Companies:** Work with social media platforms and technology companies to develop robust policies and tools for identifying and removing deep fake content promptly.
- **International Cooperation:** Engage in international cooperation to combat the spread of deep fakes, as the issue often crosses national boundaries. Share best practices and technological innovations with other countries.
- **Public Awareness and Education:** Launch awareness campaigns to educate the public about deep fakes, how to identify them, and the potential harms they can cause. Empower voters with the knowledge to critically evaluate the authenticity of digital content.

Conclusion:

• **Europe's Artificial Intelligence Act, 2024,** offers some ideas on how to think about a new legal regime to address offences that include the generation of deep fakes whose goal is to "manipulate human behaviour". Law reformers in India need to use the existing legal regime as a base to thoughtfully craft new laws that will address AI and deep fakes that can influence electoral outcomes.

20) PARTICULARLY VULNERABLE TRIBAL GROUPS (PVTGS)

(GS-II: Welfare Schemes for Vulnerable Sections of the population by the Centre and States and the Performance of these Schemes; Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections)
Who are they?

- The Union government has recognized 75 tribal communities as Particularly Vulnerable Tribal Groups (PVTGs) based on the recommendations of the Dhebar Commission (1960-61) and other studies conducted during the Fourth Five-Year Plan.
- These communities were placed in a special category due to their **significant development disparities** compared to other tribal groups.
- The identification of such groups was based on one or more of the following characteristics:
 - o Preservation of **pre-agricultural practices**,
 - o Hunting and **gathering** practices,
 - o Decreasing or **stagnant population** growth, and
 - Relatively **low levels of literacy** in contrast to other tribal groups

Problems faced by Tribals in India:

- Land Rights and Displacement: Tribes often face challenges in securing their traditional land rights, leading to displacement due to large-scale development projects like mining, dams, and infrastructure expansion.
- Lack of Access to Basic Services: Many tribal communities lack access to basic amenities such as clean water, healthcare, education, and sanitation. This results in poor health outcomes, limited educational opportunities, and overall lower quality of life.
- **Marginalisation and Discrimination:** Tribes often experience marginalisation and discrimination, both socially and economically. They may face prejudice and stereotyping, hindering their access to employment opportunities, education, and other resources.
- Loss of Traditional Livelihoods: Rapid socio-economic changes, coupled with environmental degradation, threaten traditional tribal livelihoods such as hunting, gathering, and agriculture. This loss of livelihood leads to increased poverty and dependency on external sources for sustenance.
- **Cultural Erosion and Identity Crisis:** Globalisation, modernization, and urbanisation contribute to the erosion of tribal cultures and traditions. Language loss, changes in social norms, and the influence of mainstream culture often result in an identity crisis among tribal communities, impacting their sense of belonging and cultural pride.
- **Limited awareness** in getting the rights and entitlements provided by the Governments at different levels.

Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN):

- Recognising the backwardness of PVTGs, the Government of India announced the Pradhan Mantri PVTG Development Mission in 2023-24 to improve the socio-economic conditions of PVTGs.
- In line with this initiative, the **Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN)** was launched in 2023, with a budget of ₹24,000 crore.
- The PM JANMAN seeks to provide essential services to PVTGs, which includes safe housing, clean drinking water and sanitation, improved access to education, health and nutrition, road and telecom connectivity and sustainable livelihood opportunities.
- The most significant component of this mission is the PM JANMAN Housing scheme, which aims to provide secure and habitable housing to PVTG households. Each household is entitled to receive ₹2.39 lakh in three instalments, with the goal of reaching 4.90 lakh PVTG households by 2026. In this particular scheme, problems have come up during the implementation phase.

Problems in implementing PM-JANMAN Housing Scheme:

- MGNREGA Job Card Requirement: The registration for PM JANMAN Housing requires a MGNREGA(Mahatma Gandhi National Rural Employment Guarantee Scheme) job card, but many PVTGs have had their job cards wrongfully deleted, rendering them ineligible for the scheme.
- Aadhaar Discrepancies: The mobile application to enter beneficiary data requires names
 as per Aadhaar records, but lacks guidance for cases where Aadhaar is absent, leading to
 registration issues.
- **Village List Discrepancies:** There are inconsistencies between the app's village lists and the official MGNREGA lists, causing confusion among beneficiaries and officials.
- **Complex Banking Options:** The app's extensive dropdown lists for bank selection are cumbersome and confusing, hindering smooth registration.
- **Geo-Tagging Problems:** Network issues disrupt the geo-tagging process, complicating the registration further.

• Exclusion of India Post Payments Bank (IPPB): Despite its role in financial inclusion, IPPB is not included in the app's bank list, limiting banking options for PVTGs in remote areas.

Recommendations for Better Implementation:

- Streamlining of Registration Process:
 - o **Reinstate Deleted Job Cards:** Proactively restore wrongly deleted MGNREGA job cards to ensure all eligible PVTGs can register for the scheme.
 - o **Improve App Functionality:** Address technical issues by ensuring the app's village lists match official records and simplify the banking selection process.
- Enhance Data Accuracy and Inclusion:
 - o **Distinct PVTG Identification:** Modify the app to specifically capture PVTG data, preventing non-PVTG registrations and easing verification processes.
 - Aadhaar Alternatives: Provide clear guidelines for registering beneficiaries without Aadhaar, ensuring no eligible household is excluded.
- Community Engagement and Support:
 - o **Gram Sabhas Involvement:** Engage local communities and gram sabhas in the registration process to enhance transparency and support.
 - o **Training for Frontline Officials:** Conduct training sessions for officials on using the app and handling common issues to improve efficiency and reduce errors.
- **Regular Feedback Mechanism:** Establish a system for regular feedback from PVTGs and officials to identify and resolve issues promptly.

Conclusion:

• If set right, the PM JANMAN presents a valuable opportunity to transform the lives of PVTGs, and enable them to access the benefits from India's growth story.

21) PENDENCY IN COURTS

(GS-II: Structure, Organization and Functioning of the Executive and the Judiciary—Ministries and Departments of the Government; Pressure Groups and Formal/Informal Associations and their Role in the Polity)

Context:

- According to the National Judicial Data Grid, more than 5 crore cases are pending under different courts of India. Such a high number affects the speedy justice delivery in the country.
- In this context, concerns have been raised on the issue of vacation periods for Courts. Beyond vacations, many other reasons contribute to the high pendency in Indian courts.

Reasons for High Pendency in Indian Courts

- Low Number of Judges and high vacancies: India has only about 21 judges per million people, far below the recommended 50 judges per million.
 - Vacancies in high courts average 30%, and subordinate courts face a 22% shortfall, with some states experiencing even higher vacancies.
- **High Volume of Government Litigation**: The government is the largest litigant, responsible for roughly **50% of the court load**. This includes inter-departmental litigation and routine appeals in service matters.
- **Complex Dispute Resolution System**: The slow and complex judicial process contributes significantly to case backlogs.
- **Inadequate Court Resources**: Delays are exacerbated by a lack of courtrooms, support staff shortages (averaging 26%), and procedural inefficiencies.
- **Quality Deficits**: Variability in the proficiency of judges and lawyers, along with procedural delays and the permissive legal culture, contribute to the backlog.

• **Slow Adoption of Technology**: Technological solutions are underutilised due to slow and uneven adoption, erratic electricity, and uneven bandwidth.

Measures Taken by the Government

- **Investment in Court Infrastructure:** Under a Centrally Sponsored scheme, the Government has been continuously investing and developing court infrastructure.
- **e-Courts Mission Mode Project** allows for using information and communication technology (ICT) for IT enablement of district and subordinate courts.
 - o In the upcoming **phase III**, this project aims to usher in a regime of maximum ease of justice by moving towards digital, online and paperless courts.
 - It intends to incorporate the latest technology such as Artificial Intelligence (AI), Block chain etc to make justice delivery more robust, easy and accessible to all the stakeholders.
- **Specific laws:** With a view to reduce pendency and unclogging of the courts, the Government has recently amended various laws like the Negotiable Instruments (Amendment) Act, 2018, the Commercial Courts (Amendment) Act, 2018, the Specific Relief (Amendment) Act, 2018, the Arbitration and Conciliation (Amendment) Act, 2019 and the Criminal Laws (Amendment) Act, 2018.
- Alternate Dispute Redressal Mechanism (ADR): ADR mechanisms have been promoted through the creation of institutions like the Lok Adalat. Also new laws come with the clause of using ADR before going to the Court.
- **LIMBS Project (2015)**: Legal Information Management Briefing System connects 55 ministries for better litigation management, tracking 620,000 pending government cases.
- **Administrative Reforms**: Proposals for permanent administrative secretariats and court managers to relieve judges from administrative tasks have been suggested but not fully implemented.

Suggested Solutions to Address Pendency

- **Increase the Number of Judges**: Appoint more judges to handle the vast number of pending cases, meeting the recommended ratio of 50 judges per million people.
- **Efficient Government Litigation Management**: Fully implement the National Litigation Policy, especially to avoid routine service matter appeals.
- **Encourage Alternative Dispute Resolution (ADR)**: Promote mediation, arbitration, and other ADR mechanisms to reduce court burdens.
- **Utilise Technology**: Enhance technology use in courts for case management, tracking, and virtual hearings.
- **Specialised Tribunals**: Establish more specialised tribunals for specific case types to ensure quicker resolution.
- **Legal Awareness and Assistance**: Improve public awareness of legal rights and provide better legal aid to reduce frivolous litigation.
- **Higher Standards for Judges and Lawyers**: Set higher entry standards for judges and lawyers to improve the quality of legal proceedings.
- **Increased Funding**: Allocate more resources to the judiciary to improve infrastructure, hire additional staff, and implement technological solutions.
- **Court Timings and Vacations**: Extending court sessions and reducing vacations could help but are not sufficient alone. Structural reforms are essential.

Conclusion:

 Across the world, as incomes and ownership rise and commerce and industry grow, recourse to formal systems of adjudication increases and must be welcomed because it signals trust in a robust system of conflict resolution. In India's case, the number of litigations are going to increase in the coming days. The Judicial setup should be updated to clear the pending cases and prepare itself for the future surge of the cases.

22) GREEN TECHNOLOGY

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Definition:

- The term "green technology" refers to devices, services, or processes that emit no or very few greenhouse gases (GHGs), are safe to use, and encourage a healthy and better climate for all forms of life.
- It aims at reducing electricity and natural resource consumption and also encourages the use of natural energy.
- These technologies are crucial in addressing global environmental challenges such as climate change and resource scarcity, marking a significant shift from traditional practices to sustainable alternatives.

Advantages of Adopting Green Technology:

Environmental Benefits:

- **Reduced Carbon Emissions:** Significant reduction in greenhouse gas emissions compared to fossil fuels, helping to mitigate climate change.
- **Energy Efficiency**: Improved energy efficiency in buildings, transportation, and industrial processes, reducing overall energy consumption and environmental impact.
- **Resource Conservation**: Efficient use of resources such as water, land, and raw materials, promoting sustainability.
- **Biodiversity Preservation**: Protection of natural habitats and reduction of habitat destruction, aiding in the preservation of biodiversity.
- **Improved Air and Water Quality**: Reduction in pollutants and adoption of cleaner energy sources, enhancing air and water quality.
- **Climate Resilience**: Contribution to resilience against climate change impacts such as extreme weather, sea-level rise, and drought.
- **Mitigation of Environmental Degradation:** Addressing issues like deforestation, desertification, and habitat destruction through innovative solutions.

Economic Benefits:

- **Job Creation:** New job opportunities in renewable energy, energy efficiency, waste management, and sustainable transportation.
- **Innovation and Competitiveness**: Fostering technological advancements and gaining a competitive edge in the global market.
- **Cost Savings**: Long-term operational cost savings through energy-efficient buildings, renewable energy systems, and sustainable transportation.
- **Energy Independence and Security**: Reduced reliance on imported fossil fuels, enhancing energy independence and security.
- **Market Opportunities:** Capitalising on the growing demand for environmentally friendly products and services.

Social Benefits:

- **Health Benefits:** Improved public health outcomes by reducing pollution from fossil fuel combustion and industrial processes.
- Access to Clean Energy and Services: Addressing energy poverty and promoting social equity through equitable access to clean energy.

- Community Empowerment: Rural communities can be provided with business and employment opportunities through green waste technologies, small hydro power plants and other small scale green technology units.
 - Eg: Hasiru Mane project in Karnataka trains women from marginalised communities to produce compost from organic waste thus helping in their livelihoods.
- **Affordability and Cost Burdens**: Policies to make green technology affordable and accessible to low-income individuals and communities.
- **Resilience to Climate Change**: Building resilience in vulnerable communities to climate impacts such as sea-level rise and extreme weather.
- **Environmental Justice:** Fair treatment and meaningful involvement of all people in environmental decision-making, addressing environmental injustices and disparities.

Applications of Green Technology:

Energy Efficiency:

- **Energy-efficient Appliances:** Appliances designed to use less energy for the same or improved performance, reducing overall energy consumption and costs.
- **Lighting Systems:** Implementation of LED lighting and other energy-saving lighting solutions to reduce electricity use and increase lifespan.
- **Heating, Ventilation, and Air Conditioning (HVAC) Systems:** Advanced HVAC systems that consume less energy while maintaining optimal indoor climate control.

Sustainable Transportation:

- **Electric Vehicles (EVs) and Hybrid vehicles:** Vehicles powered fully or partially by electric batteries, reducing dependence on fossil fuels and lowering emissions.
- **Public Transit Systems:** Development and enhancement of mass transit options like buses, trains, and subways to reduce the number of private vehicles on the road.
- **Alternative Fuels:** Use of **biofuels** and **hydrogen** as cleaner alternatives to traditional fossil fuels, reducing the carbon footprint of transportation.

Waste Management and Recycling:

- **Advanced Recycling Technologies:** Innovations that improve the efficiency and effectiveness of recycling processes, enabling more materials to be reused.
- **Composting Systems:** Systems that convert organic waste into valuable compost for agricultural use, reducing landfill waste.
- **Waste-to-energy Facilities:** Facilities that convert waste materials into usable energy, reducing landfill usage and generating power.

Water Management:

- **Drip Irrigation Systems:** Efficient irrigation systems that deliver water directly to the roots of plants, minimising water use and enhancing crop yield.
- **Rainwater Harvesting:** Techniques for collecting and storing rainwater for reuse, reducing demand on traditional water supplies.
- **Wastewater Treatment Plants:** Facilities that treat and purify wastewater, making it safe for reuse or release into the environment.
 - Deep Tunnel Sewerage System (DTSS) in Singapore is a sustainable water management system created using green technologies like bio reactors.
- **Water-efficient Appliances:** Devices that use less water while maintaining performance, helping to conserve water resources.

Green Building Design and Construction:

• **Passive Solar Design:** Architectural designs that maximise natural heating and lighting through strategic placement of windows and materials.

- **Green Roofs:** Roofs covered with vegetation, providing insulation, reducing urban heat islands, and improving air quality.
- **High-performance Insulation:** Materials that enhance building insulation, reducing the need for heating and cooling.
- **Energy-efficient Lighting and HVAC Systems:** Integrated systems that reduce energy consumption in buildings while maintaining comfort.

Agricultural Sustainability:

- **Organic Farming** relies on ecological processes to enhance soil fertility and productivity while minimising negative impacts on the environment and human health.
- **Integrated Pest Management (IPM)** offers an eco-friendly alternative to chemical pest control, a sustainable method promoting the utilisation of natural pest control mechanisms to cultivate robust crops while minimising disruption to ecosystems and environmental risk.
- **Biogas technology** utilises agricultural waste to produce renewable energy and fertilisers, making it environmentally friendly.
- **Agroforestry** is environmentally sustainable, utilising natural resources to ensure a healthy farming environment as it enhances food supply, income, and health.
 - Windbreak trees, live fences are some of the examples.
- **Green nanotechnology** in agriculture is an eco-friendly and cost-effective technology that enhances productivity while reducing pesticide usage. Its applications include pathogen detection, targeted delivery of nano-pesticides, and improved nutrient absorption in plants.

Smart Grids:

- **Smart Grid Technologies:** Advanced systems that enhance the efficiency, reliability, and sustainability of electricity distribution by integrating renewable energy sources and allowing for real-time monitoring and management.
- **Renewable Energy:** Solar Power, Wind Power, Hydroelectric Power and Geothermal Power are promising fields which can serve as a stable and sustainable energy source.
 - o **Passivated Emitter and Rear Contact (PERC) solar cells** produce 6 to 12 percent more energy than conventional solar panels.

Challenges in adopting Green technology:

- **Costs and Investment:** High initial investment is required for implementing new green technologies or upgrading existing infrastructure. This cost barrier affects businesses, governments, and individuals, making it difficult for them to adopt green technologies despite long-term savings and environmental benefits.
- **Inadequate Financial Incentives:** Inadequate financial incentives such as tax credits, rebates, feed-in tariffs, or low-interest loans can demotivate investment in renewable energy and energy efficiency upgrades.
- **Technological Challenges:** Some green technologies face performance issues or **scalability constraints.**
 - Renewable energy sources like solar and wind are **intermittent** and require advanced energy storage solutions for reliability.
 - Advanced recycling and waste-to-energy technologies need further development to become **economically viable** at scale.
- **Infrastructure Constraints:** Transitioning to green technology often requires substantial upgrades to infrastructure, such as electricity grids, transportation networks, and water supply systems.
- **Market Barriers and Competition:** Established Industries' Resistance and vested interests in fossil fuels may resist green technology adoption, creating market barriers.

- Subsidies and regulatory frameworks favouring fossil fuels can disadvantage clean energy alternatives.
- Monopolies or oligopolies in energy markets may restrict competition and innovation in renewable energy and energy efficiency sectors.
- **Policy and Regulatory Challenges:** Unclear or inconsistent policies, regulations, and permitting processes can create uncertainty and deter investment.
 - o **Complex permitting processes** can slow down the implementation of renewable energy mandates, carbon pricing mechanisms, and environmental standards.
- **Social and Equity Considerations:** The costs and benefits of green technology adoption may not be equitably distributed, raising concerns about social justice.
 - Low-income communities, marginalised groups, and developing countries may face difficulties accessing clean energy and sustainable transportation, exacerbating existing inequalities.

Government Measures for promoting Green technology:

- National Solar Mission (NSM) was launched under the National Action Plan on Climate Change (NAPCC) to promote solar energy and it aims to achieve 100 GW of solar power capacity by 2022, including 40 GW from rooftop solar.
- **National Wind Energy Mission** aims to enhance the capacity and efficiency of wind power installations. It supports research and development, infrastructure development, and policy support for wind energy projects.
- **FAME India** Scheme (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) provides financial incentives for the adoption of electric and hybrid vehicles. It supports the development of charging infrastructure and the promotion of clean mobility solutions.
- **Green Energy Corridors** aims to strengthen the power transmission network to accommodate renewable energy. It also facilitates the integration of large-scale renewable energy projects into the grid.
- Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)
 encourages the use of solar energy in agriculture by installing solar pumps and gridconnected solar power plants. It also aims to increase farmer incomes and promote
 sustainable irrigation practices.
- **PM Surya Ghar Muft Bijlee Yojana** is a scheme that aims to provide free electricity to one crore households in India, who opt to install roof top solar electricity units. The households will get a subsidy to overcome the high initial cost burden associated with solar energy systems.
- **National Biofuel Policy** promotes the production and use of biofuels, including ethanol and biodiesel. It targets to achieve 20% ethanol blending in petrol and 5% biodiesel blending in diesel by 2030.
- **Bureau of Energy Efficiency (BEE)** implements various programs to enhance energy efficiency across industries, buildings, and appliances.
- The **Perform, Achieve, and Trade (PAT)** scheme encourages industries to reduce energy consumption through market-based mechanisms.
- **Swachh Bharat Mission** promotes waste-to-energy projects and the adoption of advanced waste management practices. It also aims to improve sanitation and solid waste management in urban and rural areas.
- National Water Mission focuses on water conservation, efficient water use, and sustainable water management practices. It encourages the adoption of technologies for water recycling and reuse.

• **Green Building Guidelines and Rating Systems** promotes energy-efficient and environmentally friendly building practices through rating systems like **GRIHA** (Green Rating for Integrated Habitat Assessment) and **IGBC** (Indian Green Building Council).

Steps for tackling the challenges in this sector:

- **Robust Policy and Regulatory Framework:** Develop clear and consistent policies to support renewable energy, energy efficiency, and sustainable practices.
 - Simplify and expedite permitting processes for green technology projects to reduce bureaucratic delays.
 - Create supportive regulatory frameworks that prioritise green technology over fossil fuels, including stricter emissions standards and carbon pricing mechanisms.
 - Setting targets for companies to adopt green technologies like renewable energy sources in their daily operations.
- **Infrastructure Development:** Invest in sectors like grid modernisation, charging systems, water management systems and waste management systems.
- **Research and Development:** Increase funding for research and development of advanced green technologies, including energy storage, smart grids, and waste-to-energy solutions.
- **Public-Private Partnerships:** Encourage public-private partnerships to foster innovation and commercialization of new green technologies.
- Market Reforms and Incentives: Redirect subsidies from fossil fuels to renewable energy and energy efficiency projects.
 - Provide market-based incentives for clean energy producers, including renewable energy certificates and carbon credits.
 - **Encourage Competition:** Promote competition in energy markets to encourage innovation and lower costs in the renewable energy sector.
- **Inclusive Policies equitable distribution:** Ensure that green technology policies are inclusive and consider the needs of low-income and marginalised communities. Also ensure that the costs and benefits from the sector are equitably distributed.
- **International Collaboration:** Facilitating international collaboration can help in technology transfer and financial resources to develop advanced green technologies to India.
 - International collaboration is essential for advancing global climate diplomacy and negotiating international agreements such as the Paris Agreement. Through these, countries commit to collective action in creating better green technology systems.
 - International collaboration can help in harmonised policies, regulations, standards related to green technology development.

Conclusion:

• Case studies from Germany's renewable energy transition and Costa Rica's agroecological farming practices showcase the transformative potential of green technologies in achieving environmental, social, and economic objectives on both local and global scales. Advancement in technologies like Artificial Intelligence (AI) give enhanced opportunities for India to build better green technology systems which benefit not only the current generation but also future generations.

23) FLASH DROUGHTS

(GS-III: Disaster and Disaster Management)

Context

• Flash drought events are increasing around the world due to rampant climate change.

About Flash droughts

- A drought is defined as a **deficiency of precipitation over an extended period of time**, usually a season or more resulting in water shortage.
- Flash drought is the **rapid onset** or **intensification of drought**. It is often preceded by **abnormally high temperatures, high winds and changes in solar radiation.**

Causes

- **Lack of precipitation** is a major cause for flash drought. When a region experiences dry weather for a longer duration, soil moisture depletes rapidly, leading to drought stress.
- **High temperatures** can accelerate the depletion of soil moisture through increased evaporation and plant transpiration enhancing drought intensification.
 - o Transpiration is defined as the loss of water vapour from the aerial parts of plants such as leaves, stems, flowers, etc
- **Strong and dry winds** absorb moisture from plants and the soil surface depleting soil moisture reserves.
- Certain soil types such as **sandy soils have a low water holding capacity**, so they dry out more quickly during periods of little precipitation. As the soil dries out, its ability to absorb and retain any rainfall that does occur also diminishes. This creates a feedback loop, where **increasingly dry soils lead to worsening drought conditions.**

Findings

- According to the **United Nations Convention to Combat Desertification**, the world loses 12 million hectares of land every year to drought and desertification.
- The UN reveals that globally drought frequency and duration has increased by a third since 2000.
- Africa holds the highest burden of drought with East Africa facing droughts for four decades.

Impacts of Flash droughts

- Dry conditions associated with flash droughts increase the **risk of wildfires**.
- Flash droughts can lead to sudden water stress on crops, resulting in **reduced yields and crop failure.**
- Flash droughts can quickly deplete surface water and groundwater reservoirs, leading to water shortages for irrigation, drinking water supplies, etc.
- Reduced water availability may affect sanitation and hygiene, leading to increased risk of waterborne diseases.

International Efforts

- United Nations Convention to Combat Desertification (UNCCD) is the sole legally binding international agreement linking environment and development to sustainable land management. It addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found.
- **Bonn Challenge** is a global effort to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030.
- The **Integrated Drought Management Programme (IDMP)** contributes to the global coordination of drought-related efforts of existing organizations and agencies with regard to better scientific understanding and inputs for (i) Drought management (ii) Drought risk assessment, monitoring, prediction and early warning (iii) Policy and planning for drought preparedness and mitigation across sectors (iv) Drought risk reduction and response

Conclusion

• Early detection of flash droughts is essential for promoting better preparedness and mitigation strategies.

24) IMPACT OF CLIMATE HAZARDS ON WOMEN AND CHILDREN

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Context

• A study has recently revealed that **children exposed to climate hazards** are more likely to be **stunted, underweight,** and **more vulnerable to early pregnancies**.

Climate hazards

- Flooding, droughts, heatwaves and other climate-related hazards are **becoming more** intense, longer and more frequent.
- These hazards carry significant health and economic impacts.
- Vulnerable sections of the society such as **poor women and children are most affected by climate hazards.**

Findings of the study

- Women and children in Bihar, Gujarat, Uttar Pradesh, Maharashtra, Madhya Pradesh, Andhra Pradesh, West Bengal and Telangana are particularly vulnerable to climate change-related disasters.
- About 70% of Indian districts are at very high risk of floods, droughts, and cyclones. Women and children's undernutrition, teenage pregnancy and domestic violence indicators in these hotspots are also very stark.
- In northern areas of Bihar and Gujarat, **exposure to drought, flood, and cyclone co-exists** with stunting and underweight children.
- Exposure to drought events increases the likelihood of prevalence of underweight women by 35%, child marriage by 37%, teenage pregnancy by 17% and intimate partner violence by up to 50% in associated regions.

Implications of the study

- **Early warning systems** are essential to enhance adaptation and resilience to climate change hazards.
- It is important to **expand infrastructure such as cooling devices, affordable healthcare**, etc to vulnerable sections.
- Enhanced urban planning is essential to mitigate the urban heat island effect, which impacts the urban poor.
- **Laws** to safeguard workers during heat waves should cater to the unique needs of female workers and include access to water, shade, protective clothing, regular breaks, and cooling measures.

Conclusion

• Prioritizing the health and well-being of vulnerable sections is crucial to building a resilient and sustainable future.

25) CLIMATE CHANGE AND RIGHT TO LIFE

(GS-III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment)

Context

• The Supreme Court has recently recognised that **citizens have a right to be free from the adverse effects of climate change**, saying it is intertwined with the **fundamental rights to life and equality**.

Climate change in India

• Climate change is impacting India's natural environment, economy and society with increased frequency and intensity.

- **Heatwaves, floods, monsoons and declining groundwater reserves** are some of the extreme challenges that India is facing today.
- Several studies point to the **devastating economic and social costs of climate-related** damages in India due to climate inaction which could total \$35 trillion over the next 50 years.

Implications of climate change on the Indian Society

- Climate change often affects marginalized and vulnerable communities disproportionately. For example, low-income communities living in flood-prone areas are more likely to bear the brunt of extreme weather events.
- Climate change events exacerbate health inequalities as vulnerable populations such as elderly, children and tribes, often face increased health risks, such as heat-related illnesses and the spread of vector-borne diseases.
- The **primary sources of income for disadvantaged communities** engaged in sectors like agriculture and fisheries, will be largely affected due to climate change events.
- Climate change events can lead to land displacement of tribals thereby resulting in loss of livelihood and culture.

Climate change in relation to Fundamental Rights

- Article 21 recognises the right to life and personal liberty while Article 14 indicates that all persons shall have equality before law and the equal protection of laws. These articles are important sources of the right to a clean environment and the right against the adverse effects of climate change.
- **Right to health** (which is a part of the right to life under **Article 21**) is impacted due to factors such as air pollution, shifts in vector-borne diseases, rising temperatures, droughts, shortages in food supplies due to crop failure, storms, and flooding.
- The inability of underserved communities to adapt to climate change or cope with its effects violates the right to life as well as the **right to equality**.

Important Judgements

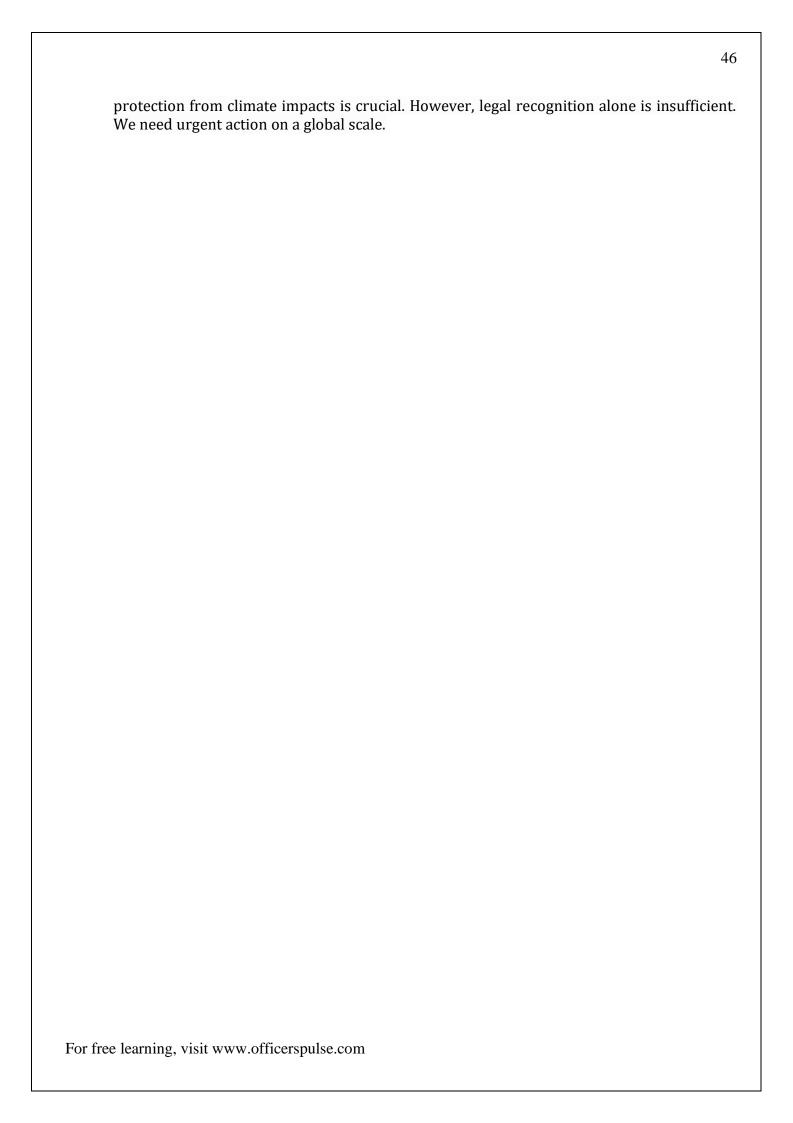
- In Virender Gaur vs State of Haryana, 1995, the Supreme court recognised the right to a clean environment while observing that ecological balance is critical for Right to Life (Article 21).
- In **Bombay Dyeing vs. Bombay Environmental Action Group**, **2006** the Supreme court recognised that climate change posed a "major threat" to the environment.
- In **Karnataka Industrial areas development board vs C Kenchappa, 2006** the Supreme court took note of the adverse effects of rising sea levels and rising global temperatures.
- In MC Mehta vs Kamal Nath, 2000 the Supreme Court held that Articles 48A and 51A(g), which say that the protection and improvement of the natural environment is the duty of the State and every citizen, must be interpreted in light of Article 21.

Lacunae in existing provisions

- There is **no single umbrella legislation** in India which relates to climate change and the attendant concerns.
- Article 48A and Article 51A(g) are mentioned as not justiciable provisions of the Constitution restricting their enforceability.
- Implementing climate-related laws requires **adequate capacity building, technical expertise, and financial resources** which seems to be lacking.
- Public participation and awareness are often limited in climate-related decision-making processes.

Conclusion

• The increasing frequency and intensity of extreme weather events, rising sea levels, and disruptions to food and water security all endanger human lives. Recognizing the right to



Model Questions

- 1. India has been moving towards a "Bharat First" strategy in its relations with the global powers. Justify.
- 2. Several countries and few states of India have initiated the idea of Menstrual leave. Critically analyse this proposal with consideration to women welfare.
- 3. India's traditional heft in South Asia is under threat due to China's activities. Examine.
- 4. India's road towards Sustainable Development Goals (SDGs) has many potholes. In this context, suggest ways to make this journey a smooth one.
- 5. Coups and Internal politics of Myanmar is not the only hurdle in smooth India-Myanmar relations. Analyse.
- 6. Explain the primary constituents of the United Nations' Human Development Report (HDR). Also, highlight the impediments in India's progress in HDR over the years.
- 7. Increased participation of Women in the job market of India can provide varied benefits to the society. Examine the issues in women participation in labour market and provide suitable solutions to address the issues.
- 8. Discuss the emerging threats to cyber security due to Artificial Intelligence (AI).
- 9. India's progress in concluding Free Trade Agreements (FTAs) with different countries has been slow over the years. Examine the reasons for the slow progress and give suitable solutions to make FTAs successful.
- 10. Alternate Dispute Redressal mechanisms (ADR) can help in reducing the load of Judiciary. Analyse the statement by considering the drawbacks functioning of ADR in India.
- 11. Elaborate on India's relation with Nepal over the years. List the challenges present in this relation and suggest measures to address those.
- 12. Trace India's growing strategic relationship with the USA.
- 13. Hypertension is a silent health hazard waiting to explode. Explain.
- 14. Define Green Growth. Examine the hurdles in achieving green growth and analyse the measures by the Government to achieve green growth.
- 15. Explain the concept of 'Para diplomacy' and its significance in the bilateral relation of India.
- 16. Growing China-Russia ties pose significant challenges to India. Elucidate.
- 17. Elaborate on India's relationship with Iran.
- 18. India-Middle East- Europe Corridor (IMEC) holds significant advantages for India. Explain.

- 19. What are Deep fakes? Explain the issues created by deep fakes and provide suitable solutions to address the same.
- 20. PM-JANMAN has an important role in addressing the issues of PVTGs. Critically Examine.
- 21. Timely delivery of justice in India is affected by high pendency in the Judicial Setup. Elaborate on this issue.
- 22. Adopting Green technology has significant challenges for countries like India. Explain with solutions to overcome the challenges.
- 23. Explain the concept of flash droughts and their impacts. Examine the measures that can be undertaken to mitigate the impacts of flash droughts in vulnerable regions.
- 24. The threat of climate change disproportionately impacts vulnerable sections of the society. Critically analyze.
- 25. In light of the recent Supreme Court judgment on climate justice, analyse the need for climate adaptation and mitigation measures in protecting the fundamental right to life?