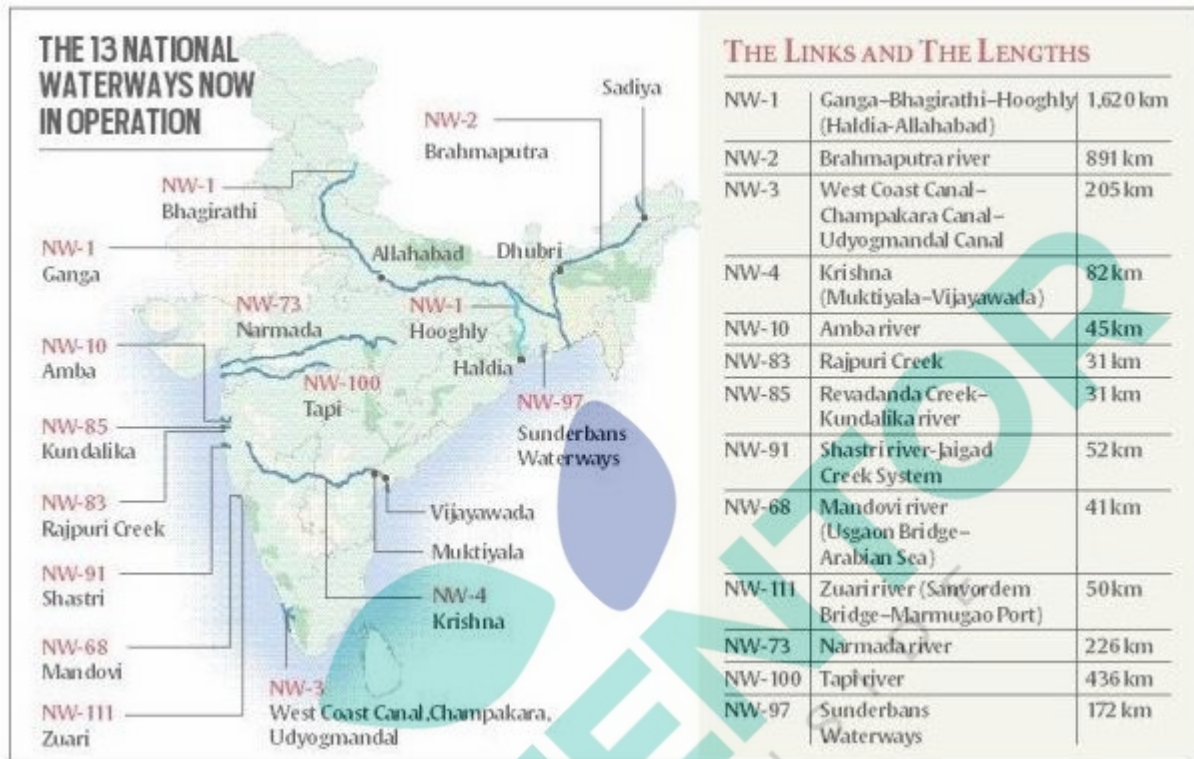


INLAND WATERWAYS NETWORK ADVANTAGES AND CHALLENGES

GS Paper - 2 - GS Paper - 1 - Water Resources - Infrastructure



Why in News?

Recently, the Union Minister of Ports, Shipping & Waterways received the maiden voyage of food-grains from Patna to Pandu port via Bangladesh in Guwahati (Assam).

- Inland Waterways Authority of India (IWAI) is planning to run a fixed schedule sailing between NW1 and NW2 heralding a new age of inland water transport for Assam & the Northeast India.
- The Inland Vessels Bill, 2021, was also approved to regulate safety, security and registration of inland vessels.
- What is the Significance of this Achievement?

- The start of cargo movement through ships through **Indo Bangladesh Protocol Route (IBRP)** marks the **beginning of a new age of economic prosperity** for the whole region of Northeast.
- This will **pave the way for growth & development** of inland water transport.
- This will also **provide the business community a viable, economic & ecological alternative** and will also play a pivotal role in **energising India's northeast as the engine of growth**.
- The sustained effort to **rejuvenate the historical trade routes** via Bangladesh got a fillip under **PM Gati Shakti**.
 - It has been envisioned that **Northeast will slowly turn & convert into a connectivity hub**.
 - The integrated development plan, under PM Gati Shakti, has been envisioned in order to amp up swift movement of cargo over Brahmaputra.

WHAT ARE INLAND WATERWAYS?

- **About:**
 - India has about **14,500 km of navigable waterways** which consist of rivers, canals, backwaters, creeks, etc.
 - As per the **National Waterways Act 2016**, 111 waterways have been declared as National Waterways (NWs).
 - **NW-1: Ganga-Bhagirathi-Hooghly River System** (Prayagraj-Haldia) with length 1620 km is the **longest National Waterway in India**.

- Besides these **organized operations by mechanized vessels**, country boats of various capacities also operate in various rivers and canals and substantial quantum of cargo and passengers are transported in this unorganized sector as well.
- In India, **IWT has the potential to supplement the overburdened railways and congested roadways**. In addition to cargo movement, the IWT sector also provides a convenient function in related activities such as carriage of vehicles {on Roll-on-Roll-off (Ro-Ro) mode of cross ferry} and tourism.

WHAT ARE THE ADVANTAGES OF AN INLAND WATERWAYS NETWORK?

- **Cheaper Mode of Transportation:**
 - Waterways are a cheaper mode of transportation vis-à-vis the available alternatives, significantly reducing the point-to-point cost of goods transportation.
 - It also reduces time, cost of transportation of goods and cargos, as well as congestion and accidents on highways.
 - The network requires **no green field investment**, but only capex (capital expenditure) for improvement/upgradation.
- **Seamless Interconnectivity:**
 - They are expected to also “**help create seamless interconnectivity connecting hinterlands** along navigable river coasts and coastal routes” and “are likely to play a crucial role in connecting the north-eastern states to the mainland.”

WHAT ARE THE IMPLEMENTATION CHALLENGES?

- **No Navigability throughout the Year:**
 - Some rivers are seasonal and do not offer navigability through the year. Around 20 out of the 111 identified national waterways have reportedly been found unviable.
- **Intensive Capital and Maintenance Dredging:**
 - All the **identified waterways require intensive capital and maintenance dredging**, which could be resisted by the local community on environmental grounds, including displacement fears, thereby posing implementation challenges.
- **Other Uses of water:**
 - Water also **has important competing uses**, viz. need for living as well as for irrigation, power generation etc. It would **not be possible for the local government/others to overlook** these needs.
- **Exclusive Jurisdiction of the Central Government:**
 - The exclusive jurisdiction of the Central Government is **only in regard to shipping and navigation on inland waterways** declared to be 'national waterways' by an act of Parliament.
 - **Utilisation/sailing of vessels**, in other waterways, is **within the ambit of the concurrent list** or is in the jurisdiction of the respective state governments.

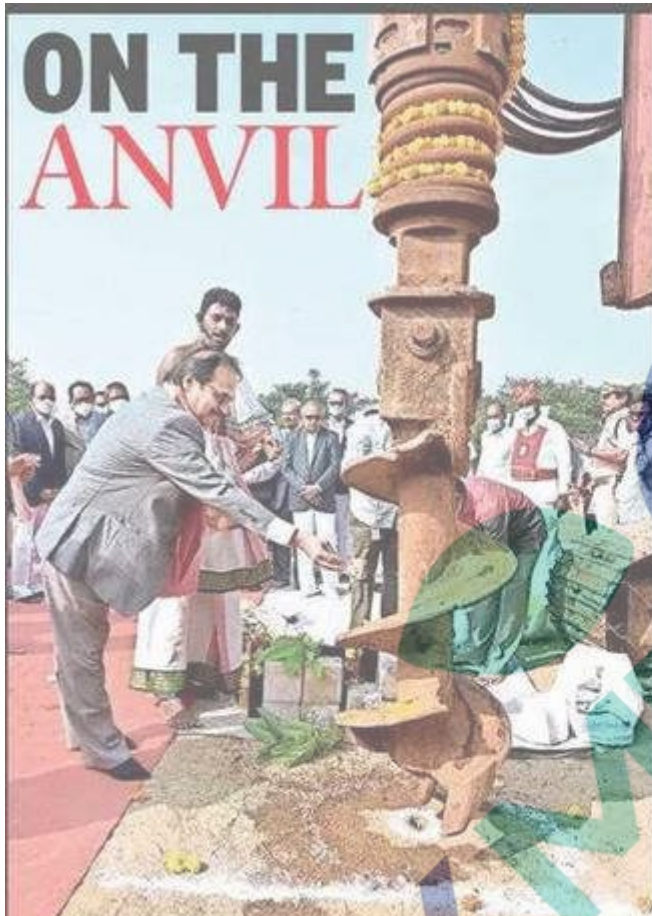
WAY FORWARD

- Water being a scarce resource with competing needs, the use of water for transport may be difficult to justify. However, considering the various advantages and taking into account the commercial viability, the numerous opportunities for employment and economic development, the **National Waterways can be effectively used as the way forward.**
- An effective waterways network **would necessitate drawing up a well-coordinated strategy** on lines of **complementarity between the national network** and other waterways, not declared as such, as well as between waterways and roadways/railways.
 - The strategy **should closely look into the various undercurrents**, including competing uses/needs, possible local resistance and also work closely and in coordination with local governments for quick and successful implementation of this important national project.

Source: PIB

MULTIPLE STATE CAPITAL IDEA AND ITS IMPACT ON GOVERNANCE

GS Paper - 2 - Indian Constitution - State Legislature - Judiciary - Fundamental Rights

 <p>ON THE ANVIL</p>	<ul style="list-style-type: none"> ➤ Foundation designed for G+5 floors keeping future expansion in mind <hr/> <p>₹33.5 crore estimated cost of project, which is expected to be completed in 6 months</p> <hr/> <ul style="list-style-type: none"> ➤ On the first and second floors, 12 court halls will be set up – six on each floor <hr/> <ul style="list-style-type: none"> ➤ On the third floor, two more court halls will be located along with judges' conference room, three office chambers and office spaces
<ul style="list-style-type: none"> ➤ Additional HC building to come up on north side of the present complex <hr/> <ul style="list-style-type: none"> ➤ New building to be ground plus three floors for now 	<ul style="list-style-type: none"> ➤ After completion of additional building, 14 court halls will be available in addition to the present 20 court halls in the existing complex

Why in News?

Recently, the Andhra Pradesh High Court directed the **State government to construct and develop Amaravati, the capital city of the State**, and the capital region within six months.

WHAT IS THE BACKGROUND?

- The Andhra Pradesh Legislative Assembly passed the **AP Decentralisation and Inclusive Development of All Regions Bill, 2020**.
 - The Bill intends to give shape to the **state government's plan of having three capitals** — executive capital in Visakhapatnam, legislative in Amaravati and judicial in Kurnool.
 - According to the government, **multiple state capitals will allow the development of several regions** of the state and hence leading to inclusive growth.
- However, previously the Andhra government had acquired around 30 thousand acres of land approximately from the farmers in and around the Amaravati region. So the decision of changing the capital may affect most of the farmers living out there.
- In November, 2021, the **Andhra Pradesh Decentralisation and Inclusive Development of All Regions Repeal Bill, 2021**, aiming to repeal the earlier laws that stipulated a three-capitals plan for the State was passed.
 - It was promised to **introduce a “better” and “comprehensive”** Bill after plugging loopholes in the previous version.

WHAT WAS THE CURRENT HC RULING?

- The High Court held that the **State legislature lacked the competence to make any legislation** for shifting, bifurcating or trifurcating the capital.
- The court **directed the government and the Capital Region Development Authority (CRDA)** to discharge their duties enshrined under the **A.P. Capital Regional Development Authority (CRDA) Act and Land Pooling Rules**.
 - It directed the **State to develop the reconstitutional plots** belonging to landowners and hand them over to landowners within three months.
 - The **Andhra Pradesh Capital Region Development Authority Act, 2014** under Section 10(1)(c)(i), provides for regulation of development activities in accordance with the development plans and regulations, and to bring aesthetics, efficiency and economy in the process of development within the jurisdiction of Capital Region Development Authority.
- The HC held the **view that the agreement signed between the farmers and the CRDA is a Development Agreement-cum-Irrevocable General Power of Attorney** and it is a statutory contract.
 - The violation of terms and conditions by the respondents — State and APCRDA — warrants interference of this court, while **exercising power under Article 226 of the Constitution**.
 - **Article 226 of the Constitution empowers a high court to issue writs** including habeas corpus, mandamus, certiorari, prohibition and quo

warrant for the enforcement of the fundamental rights of the citizens and for any other purpose.

- The court held that **Parliament alone is competent** to deal with the setting up of legislature, executive and judicial organs of the state, and this was implicit in the language employed in **Article 4 of the Constitution**.
 - **Article 4 allows for consequential changes** in the **Ist Schedule** i.e. names of the States in the Union of India and **IVth Schedule** i.e. a number of seats allotted in the **Rajya Sabha** for each state.

WHAT ARE THE CONCERNS RELATED TO MULTIPLE STATES?

- **Balancing Legislative and Executive Function:**
 - Separation of executive and legislative capital can be challenging. In the Parliamentary system of government, which has been adopted in India, **functions of the executive and the legislature are closely connected**. For example,
 - When the legislative assembly is in session, **administrative officers are required all the time for the presentation of the bill**, for briefing the ministers, etc.
 - When the legislative assembly is not in session, **the decision making by the executive requires a lot of input from various sources** including the legislators who are the representatives of the people.
- **Logistically difficult:**
 - The development of a region can be done through **policy interventions like industrial policy**. However,

separating the capitals can be against the convenience of the administration as well as the people. Also, it will be logistically difficult to implement.

WAY FORWARD

- Decentralization in the State should take place by **empowering the local governments i.e. the Panchayats and Municipal Corporations** which were constituted after the **enactment of the 73rd and the 74th Constitutional Amendment Act.**
- Multiple capitals **should not be used as an instrument for the development of the region.**
- The development of the region can be **brought by making an investment in the manufacturing and service sectors, bringing different policies benefiting the farmers and ease of doing business,** development of the infrastructure, development of the social-cultural institutions such as universities, hospitals, etc.

Source: TH

LEGACY OF SAVITRIBAI AND JYOTIRAO PHULE

GS Paper - 1 - Socio-cultural Reform Movements - Indian National Movement - Important Personalities - Role of Women



Why in News?

Recently, Maharashtra Governor was criticised for allegedly mocking **19th century social reformers Savitribai and Jyotirao Phule** for “**getting married at a young age**”.

- Mahatma Jyotirao and Savitribai Phule stand out as an extraordinary couple in the social and educational history of India.
- They spearheaded path-breaking work towards **female education and empowerment, and towards ending caste- and gender-based discrimination.**

WHO WERE SAVITRIBAI AND JYOTIRAO PHULE?

- In 1840, at a time when **child marriages were common**, Savitri at the age of ten was married to Jyotirao, who was thirteen years old at the time.
- The couple later in life strove to oppose child marriage and also organised widow remarriages.
- **Jyotirao Phule:**
 - He was an Indian **social activist, thinker, anti-caste social reformer and writer from Maharashtra.**
 - He is also known as **Jyotiba Phule.**
 - **Education:** In 1841, Phule was enrolled at the **Scottish Missionary High School (Pune)**, where he completed education.
 - **Ideology:** His Ideology was based on: **Liberty, Egalitarianism, Socialism.**
 - Phule was influenced by **Thomas Paine's book titled The Rights of Man** and believed that the only solution to combat the social evils was the enlightenment of women and members of the lower castes.
 - **Major Publications:** Tritiya Ratna (1855), Powada: Chatrapati Shivajiraje Bhosle Yancha (1869), Gulamgiri (1873), Shetkarayacha Aasud (1881).
 - **Title of Mahatma:** He was bestowed with the **title of Mahatma on 11th May, 1888** by a Maharashtrian social activist **Vithalrao Krishnaji Vandekar.**
 - **Social Reforms:** Jyotirao, the revolutionary that he was, **observed the lack of opportunities for education for young girls and women.**

- He started to **educate his wife at home** and trained her to become a teacher.
 - He realised the **pathetic conditions of widows and established an ashram for young widows** and eventually became an advocate of the idea of Widow Remarriage.
 - He attacked the **orthodox Brahmins and other upper castes** and termed them as "**hypocrites**".
 - In 1868, Jyotirao constructed a **common bathing tank** outside his house to exhibit his embracing attitude towards all human beings and wished to dine with everyone, regardless of their caste.
 - He started **awareness campaigns** that ultimately inspired the likes of **Dr. B.R. Ambedkar and Mahatma Gandhi**, stalwarts who undertook major initiatives against caste discrimination later.
 - It is believed by many that it was Phule who first used the **term 'Dalit'** for the depiction of oppressed masses often placed outside the 'varna system'.
- **Savitribai Phule:**
 - In 1852, Savitribai started the **Mahila Seva Mandal** to raise awareness about women's rights.
 - Savitribai called for a women's gathering where members from all castes were welcome and everybody was expected to sit on the same mattress.
 - She published **Kavya Phule in 1854** and **Bavan Kashi Subodh Ratnakar in 1892.**

- In her poem, **Go, Get Education**, she urges the oppressed communities to get an education and break free from the chains of oppression.
- She simultaneously **campaigned against child marriage, while supporting widow remarriage.**
- She initiated the **first Satyashodhak marriage**—a marriage without a dowry, Brahmin priests or Brahminical rituals in 1873.

WHAT IS THEIR LEGACY?

- Together, by 1848, the Phules started a **school for girls, Shudras and Ati-Shudras in Poona.**
- In the 1850s, the Phule couple initiated **two educational trusts—the Native Female School, Pune and The Society for Promoting the Education of Mahars, Mangs and Etceteras—**which came to have many schools under them.
- In 1853, they opened a **care centre for pregnant widows** to have safe deliveries and to end the practice of infanticide owing to social norms.
 - The **Balhatya Pratibandhak Griha (Home for the Prevention of Infanticide)** started in their own house.
- The **Satyashodhak Samaj (The Truth-Seeker's Society)** was established on 24th September, 1873 by Jyotirao-Savitribai and other like-minded people.
 - The Samaj **advocated for social changes that went against prevalent traditions**, including economical weddings, inter-caste marriages, eradication of child marriages, and widow remarriage.
 - Also, Satya shodhak samaj was founded with a purpose to give education to the lower castes, scheduled caste,

scheduled tribes and made them aware of the exploiting tradition of society.

Source:IE



INDIA - SRI LANKA BILATERAL MARITIME EXERCISE

SLINEX

GS Paper - 3



Why in News?

The Ninth Edition of **India - Sri Lanka Bilateral Maritime Exercise SLINEX** (Sri Lanka–India Naval Exercise) is being conducted at Visakhapatnam.

- The **8th** edition of **SLINEX** was conducted off Trincomalee, Sri Lanka in October 2020.

WHAT ARE THE KEY POINTS?

○ About:

- The exercise is being conducted in two phases, **the Harbour Phase** at Visakhapatnam followed by the **Sea Phase in the Bay of Bengal**.
 - The **Harbour Phase** would include professional, cultural, sporting and social exchanges.
 - **Sea Phase** will include surface and anti-air weapon firing exercises, seamanship evolutions, aviation operations including cross deck flying, advanced tactical manoeuvres and special forces operations at sea.

○ Fleet:

- Sri Lanka Navy will be represented by **SLNS Sayurala**, an **advanced offshore patrol vessel** and the **Indian Navy** by **INS Kirch**, a **guided missile corvette**.
- **Other participants from the Indian Navy**,
 - **INS Jyoti**, a Fleet support tanker.
 - **Advanced Light Helicopter (ALH)**.
 - **Seaking and Chetak Helicopters**.
 - **Dornier Maritime Patrol Aircraft**.

○ Aim:

- It aims to **enhance interoperability, improve mutual understanding and exchange best practices and procedures** for multi-faceted maritime operations between both navies.
- **SLINEX exemplifies the deep maritime engagement between India and Sri Lanka** and has grown in scope

over the years to strengthen mutual cooperation, in consonance with India's policy of 'Neighbourhood First' and vision of 'Security and Growth for All in the Region (SAGAR)'.

WHAT ARE THE OTHER EXERCISES BETWEEN INDIA AND SRI LANKA?

- Exercise MITRA SHAKTI (Military Exercise)
- Dosti Trilateral Exercise (Coast guard India, Maldives and Sri Lanka).

[Source:PIB](#)



BOLTZMANN MEDAL AWARDED TO PROFESSOR DEEPAK DHA

GS Paper - 3 - Scientific Innovations & Discoveries - Achievements of Indians in Science & Technology



WHAT IS THE BOLTZMAN MEDAL?

- This medal is awarded **every three years** by the **Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP)** at the Statphys Conference.
 - The **IUPAP** was **established in 1922 in Brussels** with 13 Member countries and the first General Assembly was held in 1923 in Paris. It **currently has 60 country members. India joined it in 1948.**
 - It is the **only international physics organisation** that is organised and run by the physics community itself.
- The award **comprises medals and honours** for the contribution in Statistical Physics. The award consists of

the **gilded Boltzmann medal with the inscription of Ludwig Eduard Boltzmann.**

- **Ludwig Eduard Boltzmann** was an Austrian physicist and philosopher.
- It is given **only once to a person and on the condition** that that person has not won the **Nobel prize** so far.
- It was **initiated in 1975**, with Nobel laureate (1982) **K.G. Wilson** being the first recipient.

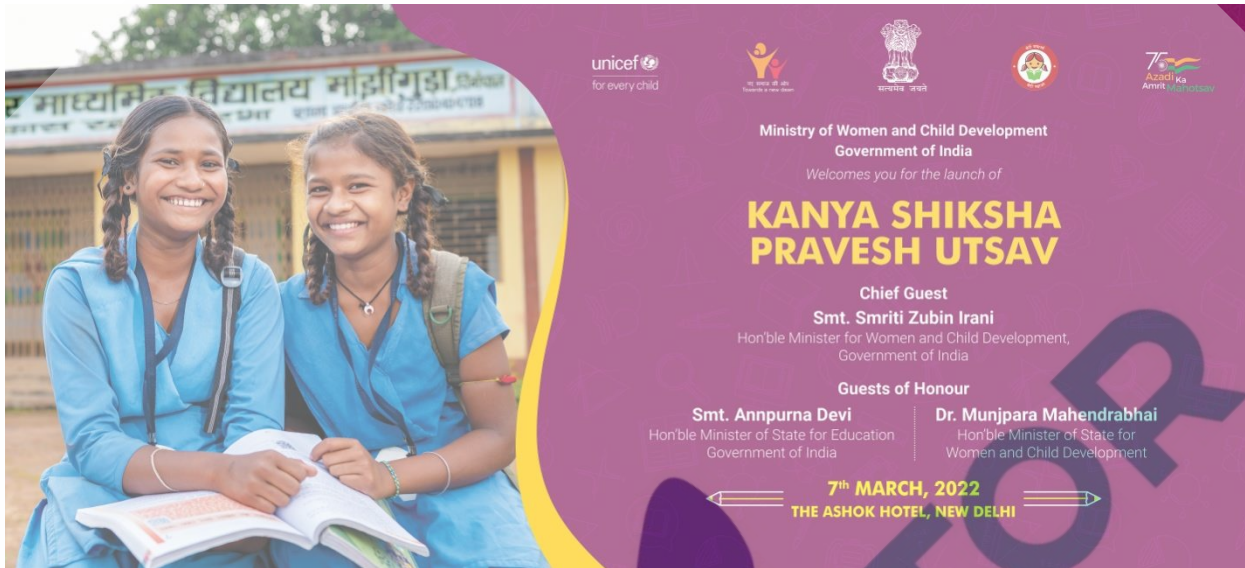
WHO IS PROFESSOR DEEPAK DHAR?

- Professor Dhar was **born 1951** and completed his graduation in Science in 1970 from University of Allahabad, then **Masters in Physics from Indian Institute of Technology**, Kanpur in 1972. Then he went to the US for PhD.
- Joined **Tata Institute of Fundamental Research (TIFR)** as a research fellow in 1978. He worked at TIFR over the years as a full-time professor and retired in 2016.
- Since then, he has joined **Indian Institute of Science Education and Research**, Pune (IISER) as a visiting faculty.
- Why was he **Awarded the Medal?**
- He has been chosen for **this award for his contributions in the field of statistical physics, including universal long-time relaxation** in disordered magnetic systems, exact solutions in percolation and cluster counting problems and definition of spectral dimension of fractals.

Source:TH

KANYA SHIKSHA PRAVESH UTSAV

GS Paper - 2 - Issues Related to Women



Why in News?

Recently, the government launched a nation-wide campaign called **Kanya Shiksha Pravesh Utsav** on the eve of the **International Women's Day (8th March)**.

- The aim of the campaign is **to bring back four lakh out-of-school adolescent girls in the 11-14 years age group** into the education system.
- What are the Key Points of the Campaign?
- **Aim:** The project aims to work on a complete system for **out-of-school girls** by building on existing schemes and programmes such as **Schemes for Adolescent Girls (SAG)**, **BetiBachaoBetiPadhao (BBBP)**, and **National Education Policy (NEP)**.
- **Implementing Agency:** The campaign is being steered by the **Ministry of Women And Child Development** in partnership with the **Ministry of Education**.

- **Implementation:** The campaign focuses on **convergence and coordination** between ministries, departments and states.
 - The campaign **will be implemented as part of the BBBP project**, with the primary beneficiaries being over 4,00,000 out-of-school adolescent girls.
 - **Over 400 districts across all states will be funded under the Beti Bachao Beti Padhao Scheme** for grassroots level outreach and awareness generation to sensitise communities and families to enrol adolescent girls in schools.
 - Further, **funding from Samagra Shiksha Abhiyan, and Anganwadi workers (AWWs)** will be further incentivised for counseling and referring out of school adolescent girls.
- **Data to be Collected:** It strives to collect data on out-of-school girls, **based on their visits to anganwadi centres for nutrition, nutrition education and skilling.**
- **Significance:** Bringing out-of-school girls back to the education system has been the target since the **Right to Education Act** was enacted (2009).
- **Need:** The need has arisen because the Scheme For Adolescent Girls (SAG), which initially took care of out-of-school girls, was getting less traction.

[Source: TOI](#)

DAILY QUIZ

1) Consider the following statements regarding the SARAS radio telescope:

1. The telescope is built by India in collaboration with the Russian space agency.
2. It is used in detecting extremely faint radio wave signals from the stars.
3. Like all electromagnetic waves, radio waves travel in a vacuum at the speed of light.

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

- a. 1 and 2 only
- b. 2 only
- c. 2 and 3 only
- d. 1 and 3 only

Answer : c

2) Consider the following statements regarding Daylight Harvesting Technology (DHT):

1. It is an advanced technology used in harvesting cash crops, powered by solar energy.
2. The technology is funded by the Ministry of Power in collaboration with the Ministry of Agriculture.

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

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

Answer : d

3) Consider the following statements regarding Sagar Parikrama:

1. It is a navigation journey to be conducted in all coastal states/UTs to show solidarity with all fishing communities.
2. The initiative is launched by the Ministry of home affairs.
3. The initiative commences from the coastline of Mandvi in the coast of Bay of Bengal in Odisha.

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

- a. 1 only
- b. 2 and 3 only
- c. 3 only
- d. 1, 2 and 3

Answer : a

4) Consider the following statements regarding Plasma:

1. Plasma is the third state of matter and is a poor conductor of electricity.
2. It has equal numbers of positively and negatively charged particles.
3. Plasma is produced when the atoms in a gas become ionized.

Which of the above statement(s) is/are **incorrect**?

- a. 1 and 2 only
- b. 1 only
- c. 3 only
- d. 1, 2 and 3

Answer : b

5) Consider the following statements regarding the Temporary Protection Directive:

1. It is an exceptional measure by the European Commission used to protect the displaced persons from the non-EU countries.
2. Germany and France are the European Union members who are not part of the Temporary Protection Directive.

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

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

Answer : a

