



### CA Revision Module - Test 26 (January 2024)

1. Consider the following.

1. Low temperatures
2. High wind speed
3. Moisture availability
4. Plenty of aerosols

How many of the above factors contribute to the formation of dense fog in North India in winter?

- a. Only one
- b. Only two
- c. Only three
- d. All four

Answer : c

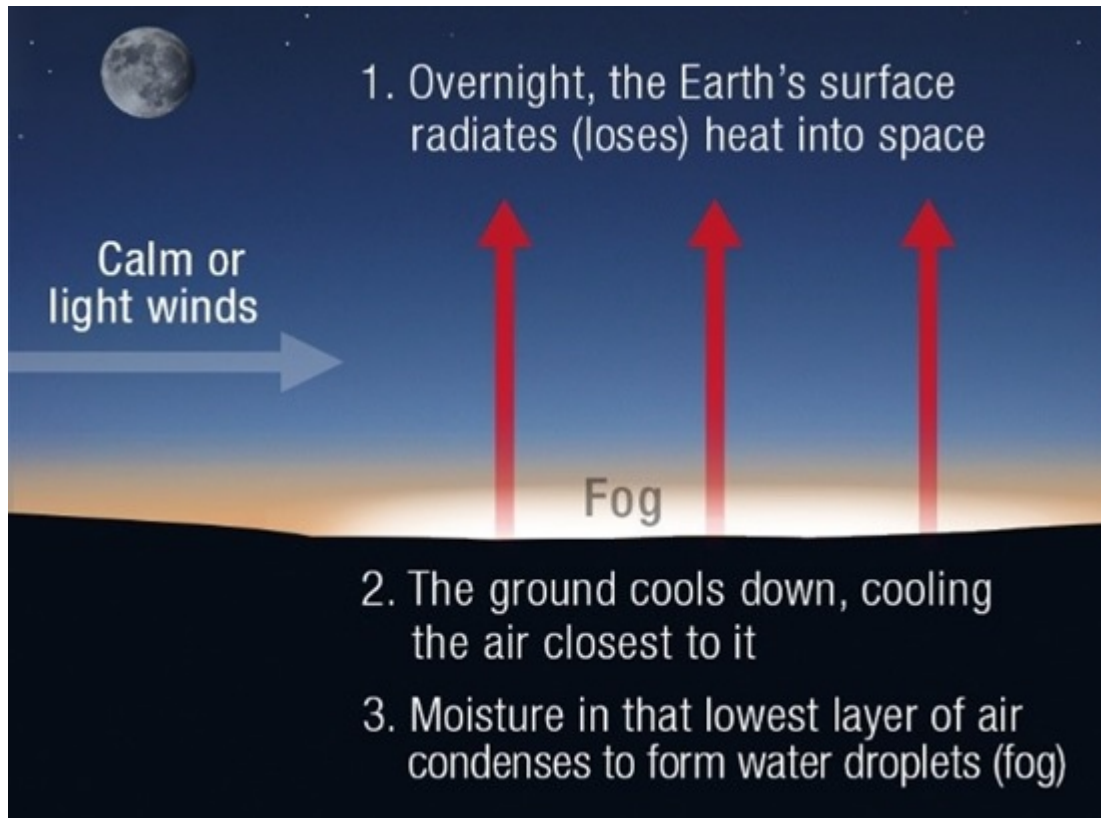
#### **Fog**



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*Dense fog covered the better part of north India during the last days of December and the 1st couple of days of 2024.*

- **Fog** - It is a collection of small droplets of water produced when evaporated water has cooled down and condensed.



- It is nothing but a thick cloud, but very close to the earth's surface.
- **Conditions for a thick fog**
  - Lower temperatures
  - Abundant moisture near the surface
  - Higher humidity
  - The process by which it cools
- Fog materialises whenever there is a temperature disparity between the ground and the air.
- **Dense fog in India** - The fog in entire Indo-Gangetic plains is due to the presence of
  - Low temperatures
  - Low wind speed
  - Moisture availability
  - Plenty of aerosols

2. Consider the following statements with respect to minority educational institutions.

1. Article 30 of the Indian Constitution confers on the minority, the discretion to choose the administrators of the institution.
2. The minority character of an educational institution will be revoked, if the administrators from other communities run the institution.

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

**Aligarh Muslim University (AMU)**

Recently the Supreme Court was hearing a reference related to the minority status of Aligarh Muslim University.

- **Established in** - 1875 as Muhammadan Anglo-Oriental (MAO) College
- **Founder** - Sir Syed Ahmad Khan
- **Pre-independence** - Aligarh Muslim University (AMU) Act, 1920 was passed during colonial era which enabled MAO and a few other colleges to be affiliated with it.
- **Post-independence** - 2 amendments to 1920 Act in 1951 and 1965 changed the structure of the governing body of the university and gave powers to President of India to nominate its members.
- **S. Azeez Basha vs Union of India, 1967** - The Court ruled that the AMU was not a minority institution as there was a central legislation governing the same.
- **Supreme Court** - The **minority character of an educational institution is not lost if** its founders, who belong to a particular minority community, chose **administrators from other communities to run** the institution.
- **Article 30** - All religious and linguistic minorities in India have the right to establish and manage their own educational institutions including schools, colleges and other educational facilities.
- It **confers on the minority the discretion to choose the administrators of the institution.**

3. Consider the following statements.

1. Every individual has the right to move the Supreme Court for the enforcement of their fundamental rights.
2. Special leave to appeal by the Supreme Court.
3. Law declared by Supreme Court to be binding on all courts.
4. Enforcement of decrees and orders of Supreme Court.
5. Power of superintendence over all courts by the High Court.

In the above statements, which are the components of Basis Structure doctrine in India?

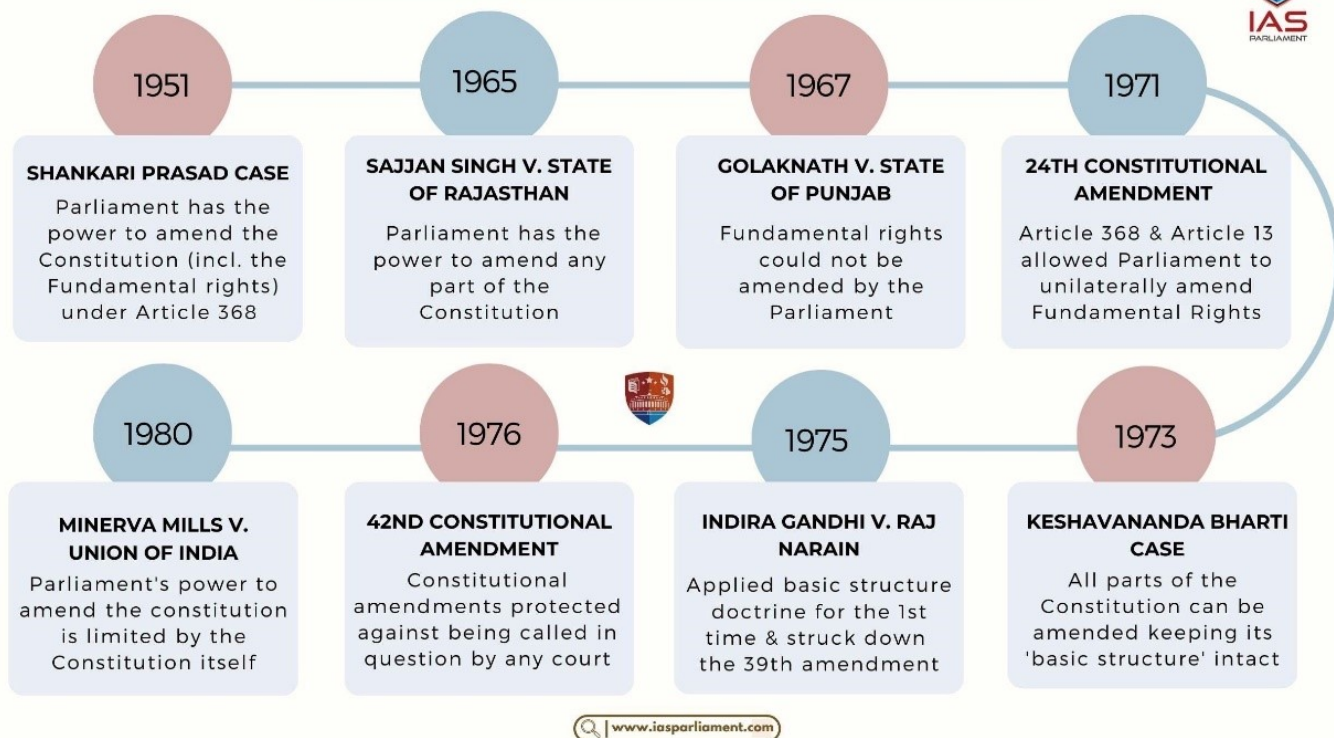
- a. All except 3 & 5
- b. All except 4
- c. All except 2
- d. All five

Answer : d

### Basic Structure Doctrine

- **Propounded on** - 24th April 1973 in the Kesavananda Bharati case.
- It is *neither mentioned in the Indian Constitution nor openly defined*.
- It is a constitutional principle that limits the power of Parliament to amend the Constitution and preserves its essential features.

## EVOLUTION OF BASIC STRUCTURE DOCTRINE



- It is a form of judicial review that is used to test the legality of any legislation by the courts.
- **Components** - Supremacy of the Constitution
  - Powers of the Supreme Court (SC) under
    - **Art 32** - Every individual has the right to move the SC for the enforcement of their fundamental rights.
    - **Art 136** - Special leave to appeal by the SC.
    - **Art 141** - Law declared by SC to be binding on all courts.
    - **Art 142** - Enforcement of decrees and orders of SC.
- Powers of the High Courts under
  - **Art 226** - Power of High Courts to issue certain writs
  - **Art 227** - Power of superintendence over all courts by the High Court.

## CONSTITUENTS OF THE BASIC STRUCTURE

Federal & secular character of the Constitution	Democratic character of our policy	Liberty of thought, expression, belief, faith and worship
Welfare state and egalitarian society	Equality of status and opportunity	Separation of powers
Dignity of the individual	Unity and integrity of the nation	Sovereignty of India

4. Consider the following statements with respect to Foreign Contribution Regulation Act (FCRA), 2010

1. Ministry of External Affairs and Ministry of Finance oversee the implementation of this act.
2. Foreign funds can be availed only through the State Bank of India's New Delhi branch.
3. It bars the sub-granting by NGOs to smaller NGOs which works at the grass roots level.
4. Administrative expenses was capped at 50% of the total foreign funds received, earlier the upper limit was 70%

How many of the above statements is/are correct?

- a. Only one
- b. Only two
- c. Only three
- d. All four

Answer : b

### Foreign Contribution Regulation Act (FCRA)

*The Foreign Contribution Regulation Act, 2010 (FCRA) registration of 2 prominent NGOs — Centre for Policy Research (CPR) and World Vision India (WVI) have been cancelled recently.*

- **FCRA** - It regulates foreign donations and ensures that such contributions do not adversely affect internal security
- **Established in** - 1976 during Emergency period amidst the apprehensions that foreign powers were interfering in India's affairs by pumping money through independent organisations
- **Implementation by** - **Ministry of Home Affairs**
- **Applicability** - To all associations, groups and NGOs which intend to receive foreign donations.
- The annual returns must be filed on the lines of Income Tax.
- **Foreign contribution** - It means the donation, delivery or transfer made by any foreign source
- **Availing foreign funds** - In a designated **bank account at SBI's New Delhi branch.**
- **Utilisation of foreign funds** - Only for the purpose for which they have been received and as stipulated in the Act.
- **Eligible** - It must have a definite cultural, economic, educational, religious or social programme with prior FCRA registration/ permission from the Central Government.
- **Ineligible** - The candidates for elections, journalists or newspaper and media broadcast companies, judges and Government servants, members of legislature and political parties or their office-bearers, and organisations of a political nature.
- *Aadhaar provision are mandatory* for all office-bearers, directors and other key functionaries of an NGO.
- **Administrative expenses** was capped at **20% of the total foreign funds** received, earlier the upper limit was 50%
- **Bar on sub-granting by NGOs to smaller NGOs** who work at the grass roots level.

5. Consider the following statements with respect to Square Kilometre Array (SKA) Observatory

1. It is a single largest telescope in the world.
2. It is an infrared wave telescope used to detect infrared waves emitted by the celestial objects.
3. India is a part of this observatory.

How many of the statement(s) given above is/are correct?



- a. Only one
- b. Only two
- c. Only three
- d. None

Answer : a

## Square Kilometre Array (SKA) Observatory

*India had decided to formally join the Square Kilometre Array (SKA) project, an international scientific collaboration working to build the world's largest radio telescope.*

- It is *not a single large telescope*, but a **collection of thousands of dish antennas** operating as a single unit.
- **SKA Observatory Convention** - The international treaty that established the facility as an intergovernmental organisation.
- **Objective** - To **create 1 square kilometre** of effective area for **collecting radio waves using radio telescopes**.
- A **radio telescope** is a specialized type of antenna and receiver system used to detect and collect **radio waves** emitted by celestial objects.
- **Mission** - To build and operate cutting-edge radio telescopes to transform our understanding of the Universe, and deliver benefits to society through global collaboration and innovation.
- **Headquarters- United Kingdom (UK)**
- **Implementation** - By installing 1000's of smaller antennas in a specific array design that would make them function like a single radio telescope.
- **Budget** - USD 2.4-billion project
- **Distribution of antennas** - About 200 of them in South Africa and more than 130,000 in Australia.
- **Installation location** - In sparsely populated areas in order to minimize signal interference from undesirable Earth-based sources.
- **Consortium Members** - It includes 16 member countries, such as Australia, South Africa, Canada, China, India, Japan, and several European nations.
- **Working** - It receive radio waves from space using antennas which are sent through a processing chain that enables the astronomical data ultimately to be turned into an image of the sky.
- **Advantage** - Unlike optical telescopes, radio telescopes can be used even in cloudy skies, as the longer wavelengths can pass through clouds unhindered.
- They can **detect invisible hydrogen gas**, the most abundant element in the Universe, which emits in the radio band at 1420 MHz.
- They can also reveal areas of space that may be obscured by cosmic dust.
- **Significance** - It will be the world's biggest and most advanced radio telescope ever constructed.
- **India** - Being involved, since its inception in 1990s, led by Pune-based National Centre for Radio Astrophysics (NCRA).
- **India's contribution** - In design and development of the telescope and the development, and operation, of the Telescope Manager, the 'neural network' or the software that will run the entire facility.
- **Benefits** - Though none of the SKA facilities would be located in India, there are immense science and technology gains to the Indian scientific community.

6. Consider the following statements

**Statement-I:** United Liberation Front of Assam (ULFA) aims to establish a sovereign Assamese nation by an armed struggle against the Indian state.

**Statement-II:** United Liberation Front of Assam (ULFA) was born due to the failure of Assam Accord of 1985.

Select the correct answer using the codes given below:

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

Answer : c

## ULFA Peace Accord

*Recently, the pro-talks faction of the United Liberation Front of Asom (ULFA) have signed a historic tripartite peace deal with the Government of India and the State government of Assam.*

- **Historical background** - There was an influx of migrants from all over since 19th century into Assam.
- It was further exacerbated by the Partition in 1947 and the subsequent exodus of refugees from the erstwhile-East Pakistan.
- It resulted in a 6-year long mass movement from 1979.
- **ULFA** - United Liberation Front of Assam was **born during the anti-foreigner's movement of 1979**.
- **Aim** - To **establish a sovereign Assamese nation** through an **armed struggle against the Indian state**.
- **Geographical spread** - It still has camps in Myanmar, and previously had camps in both Bangladesh and Bhutan.
- **Links to other insurgents** - Outfits in the Northeast, Myanmar and also with Islamic terror outfits like Al-Qaeda.
- It also has links to Pakistan's Inter-Services Intelligence (ISI).
- During the **Kargil War**, ULFA openly supported Pakistan in its monthly newsletter Swadhinata.
- **ULFA peace accord** - ULFA cadres have agreed to surrender arms and ammunition, vacate their camps.
- They have decided to join the mainstream and to engage in the peaceful democratic process.
- It would be made a time-bound programme by the Ministry of Home Affairs to fulfil the demands of the ULFA.
- 97 out of 126 Assembly seats in Assam would be reserved for indigenous people.
- Rs. 1.5 lakh crore investment had been pledged in the peace accord.
- Constituency safeguards would be ensured by protecting land rights and putting restrictions on migration from one constituency to another.

7. Consider the following pairs.

Places in News	Location
1. Pong dam	- Uttarakhand
2. Kalpasar Project	- Rajasthan
3. Dahej	- Gujarat
4. Ratle Project	- Himachal Pradesh

How many of the pair(s) given above is/are correctly matched?

- a. Only one
- b. Only two
- c. Only three

d. All four

Answer : a

## Pong dam

*Recently the draft policy was prepared to declare Pong Dam Wildlife Sanctuary and the surrounding area an eco-sensitive zone.*

- **Built in** - 1975, named after Maharana Pratap and called as Maharana Pratap Sagar.
- **Location** - Over Beas River in **Himachal Pradesh**.
- It is the highest earth-filled dam in India and is one of India's largest man made reservoir.
- In 1983, Pong Dam Wildlife Sanctuary was declared by the state government.
- In 1994, the Government of India declared Pong Dam Lake Bird Sanctuary as a 'wetland of national importance' and in 2002, it was declared as a Ramsar Site.
- It is the largest congregation of the 'Bar headed geese'.
- **Vulture Cafe** - A place where cattle carcasses are made available at one spot, for vultures to 'feast' (scavenge) upon them.

## Kalpasar Project

*Local fishers of Gujarat's Baruch district suffer from lack of fish catch due to Bhadbhut barrages and others dams across River Narmada.*

- It is known as 'The Gulf of Khambhat Development Project'.
- **Mission** - To make a sustainable water state where there is 'water for all, water forever and more crops per drop'.
- **Vision** - To store **Gujarat's** 25% average annual surface water by 30 km long dam across the Gulf of Khambhat.
- It will be the world's largest fresh water reservoir in sea.

## Dahej

*Industrial pollution has destroyed local fisheries in Dahej near Bharuch, Gujarat.*

- **Location** - Near the ancient port site of Barygaza (near today's Bharuch) on the Gulf of Khambhat, **Gujarat**.
- It began to be developed as a Special Economic Zone (SEZ) in 1990.
- It is one of the 4 Petroleum, Chemical and Petrochemicals Investment Regions (PCPIR) in the country.
- **Ecological significance** - The freshwater of the Narmada enters the saline waters of the Gulf of Khambhat in Dahej.
- Many types of sea life including shrimp, bumla, salmon, boi, makul are found here.
- It is also the breeding ground of the Hilsa ('palwa' in Gujarat) fish.

## Ratle Hydro Electric Project

*Government diverts Chenab River water to expedite hydroelectric project in Jammu and Kashmir.*

- It is an 850 MW hydroelectric power project under construction on the Chenab River in **Jammu and Kashmir**.
- The project is scheduled to open in 2026.



8. Consider the following statements with respect to copper reserves.

1. Rajasthan has the largest copper reserves in India.
2. Chile has the world's largest copper reserves.
3. Australia has the world's largest production of copper.

How many of the statement(s) given above is/are **incorrect**?

- a. Only one
- b. Only two
- c. Only three
- d. None

Answer : a

### Copper reserves in India

- **Copper** - It is a good conductor of electricity and is ductile (able to be drawn out into a thin wire).
- **Reserves in India - Rajasthan (50%)**; Madhya Pradesh (24%); Jharkhand (19%); 7% in AP, Gujarat, Haryana, Karnataka etc.
- **Reserves across globe - Chile** has the **world's largest copper reserves** and is also the **world's largest copper producer**.
- Zambia has about 6% of the world's copper reserves and was the 8th largest producer of copper in 2022.
- **Reserves** - Chile, Australia, Peru, Russia and Mexico.
- **Production** - Chile, Peru, the Democratic Republic of the Congo, China, the United States.



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Composition	Alloys
Copper + iron + nickel	Stainless steel
Copper + nickel	Morel metal
Copper + aluminium	Duralumin
Copper + zinc	Brass
Copper + tin	Bronze



9. Who among the following nominates both the Chairman and other members of Supreme Court Legal Services Committee (SCLSC)?

- The President
- The Parliament
- Chief Justice of India
- Supreme Court Collegium

Answer : c

### Supreme Court Legal Services Committee (SCLSC)

*Recently, Department of Justice have announced nomination of Supreme Court judge Justice BR Gavai as the Chairman of the Supreme Court Legal Services Committee (SCLSC).*

- **Constituted under** – Section 3A the Legal Services Authorities Act, 1987 which states that the Central Authority (NALSA) shall constitute the committee.
- **Objective** – To provide free and competent legal services to the weaker sections of society, in cases falling under the top court's jurisdiction.
- **Composition** – It consists of a sitting SC judge, who is the chairman, along with other members possessing the experience and qualifications prescribed by the Centre.
- **Selection criteria** – Under Section 27 of the 1987 Act, the Centre is empowered to make rules in consultation with the CJI, by notification.
- Rule 10 of the NALSA Rules, 1995, entails the numbers, experience, and qualifications of the SCLSC members.
- **Appointment** – **CJI nominates both the chairman and other members of SCLSC** and appoints the Secretary to the Committee.
- **Powers** – It can appoint officers and other employees as prescribed by the Centre, in consultation with the CJI.
- **Legal Services Authorities Act 1987** – Gives a statutory base to legal aid programmes and to provide free and competent legal services to eligible groups.
- **National Legal Services Authority (NALSA)** – It was constituted in 1995 to monitor and evaluate the implementation of legal aid programmes and to lay down policies for making them available.

10. Consider the following with respect to PRITHvi Vigyan:

- It aims to observe the atmosphere, ocean, geosphere, cryosphere and solid earth.

2. It is implemented by Ministry of Science and Technology.
3. PACER Mission is a sub-scheme under this program.

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

- a. Only one
- b. Only two
- c. Only three
- d. None

Answer : b

## PRITHvi Vigyan (PRITHVI)

*The Prime Minister of India has approved the overarching scheme 'PRITHvi Vigyan' (PRITHVI).*

- **Implemented by** - **Ministry of Earth Sciences** (MoES).
- **Timeline** - 2021-26, at an overall cost of Rs. 4,797 crore.
- It encompasses 5 ongoing sub-schemes namely
  - **ACROSS** - Atmosphere & Climate Research-Modelling Observing Systems & Services
  - **O-SMART** - Ocean Services, Modelling Application, Resources and Technology
  - **PACER** - Polar Science and Cryosphere Research
  - **SAGE** - Seismology and Geosciences
  - **REACHOUT** - Research, Education, Training and Outreach

## Objectives

- To **observe the atmosphere, ocean, geosphere, cryosphere and solid earth**.
- To predict weather, ocean and climate hazards.
- To explore polar and high seas regions of the Earth.
- To do sustainable harnessing of oceanic resources.
- To translate the knowledge of Earth systems science into services for societal, environmental and economic benefit.
- Earth System Sciences deal with all the 5 components of the earth system namely atmosphere, hydrosphere, geosphere, cryosphere, and biosphere and their complex interactions.

11. Consider the following pairs.

Monument/Temple	Significance
1. Kalaram Temple	- Mahad Satyagraha
2. Gol Gumbaz	- Whispering gallery
3. Somnath Temple	- Solanki style

How many of the pair(s) given above is/are correctly matched?

- a. All three
- b. Only one
- c. Only two
- d. None

Answer : c

## Kalaram temple

- It is built in **1792**, with the efforts of one **Sardar Rangarao Odhekar**, it derives its name from a black statue of the Lord Kala Ram translates literally to Black Ram.
- **Location** - On the banks of the **River Godavari** in the Panchavati area of the Nashik in Maharashtra. It was a part of Dandakaranya (dense forest in central India).
- **Historical importance of Kalaram temple** - In 1930 **Nashik Satyagraha** is led by **B R Ambedkar** along with the Marathi teacher and social activist Pandurang Sadashiv Sane, known as Sane Guruji.
- Ambedkar organised a large protest outside the Kalaram temple with many dalit protesters to demand access for Dalits to Hindu temples.
- **Mahad satyagraha** or Chavdar Tale Satyagraha was held in 1927 to assert the rights of Dalits to use the water in public places.

## Gol Gumbaz

- It is located in **Karnataka**, built in Indo-Islamic style of architecture.
- It is the tomb of **Mohammed Adil Shah** (ruled 1627-1657).
- It is the 2nd largest dome ever built, next to St Peter's Basilica in Rome.
- It includes a mosque, a Naqqar Khana (a hall for the trumpeters), a central chamber, where every sound is echoed 7 times, Whispering Gallery, where even minute sounds can be heard clearly 37 metres away.
- It is a protected monument administered by the Archeological Survey of India.

## Somnath Temple

- **Located in** - Prabhas Patan, Veraval, in Gujarat.
- It is the holy place of the **1st Aadi Jyotirling Shree Somnath Mahadev**, among the 12 Jyotirlinga shrines of Shiva.
- It is also the place where Lord Shri Krishna took his last journey.
- **Built by** - In 1782, Maratha queen Ahalyabai Holkar built a small temple at the site.
- Somanatha temple or Deo Patan faced several attacks from raiders, with the most damaging by Mahmud of Ghazni in 1026 CE.
- **Under Mughals** - Akbar permitted the worship of the linga in the Somanatha temple and appointed desais /officers to administer it.
- Aurangzeb gave orders for its destruction and its conversion into a mosque in 1706 just before he died.
- **After Independence** - The contemporary Somnath temple was reconstructed in the Maru-Gurjara style under the orders of Vallabhbhai Patel and completed in 1951.
- Maru-Gurjara style is also known as **Solanki style**, the style of West Indian temple architecture

12. The term "Rattapparai" seen in news is related to which of the following?

- It is a volcanic rock that originates from molten magma deep within the Earth's mantle.
- It is a rock art painting predominately painted in red ochre.
- It is a meteorite that formed the Ramgarh crater due to its streak in India.
- It is a red fossil rock found near Godavari basin in Maharashtra.

Answer : b

## Rattapparai

- The word, Rattapparai, has become synonymous with the **rock art painted in red ochre**.
- They are located in three hillocks: **Melvalai, Alampadi and Sethavarai** in Villupuram district of **Tamil Nadu**.

- **Alampadi** - The paintings are in red and white ochre.
- **Melvalai** - A nondescript village whose paintings dates back to 3000 B.C. and majority of etchings was in red ochre. Painting depicting a group of men rowing a boat, indicates a link between the Indus Valley and the southern region.
- **Sethavarai** - It has paintings of animals, especially a deer and a fish. The outlines are in red ochre, while the inner portion is filled with white ochre.
- **Ramgarh crater**- It is located in **Rajasthan**, it was formed approximately 165 million years ago due to a meteor impact.
- Inside the crater, there is a lake called **Pushkar Talab**, which contains both saline and alkaline water.
- **Waddham**, a reserve forest, is a well-known fossil site where a **full-fledged dinosaur skeleton** was found near the Godavari basin in Maharashtra.

13. Consider the following statements with respect to Maru-Gurjara style

1. It is also called as Indo-Saracenic architecture.
2. It originated as a regional style in Gujarat and Rajasthan, later it become popular in Buddhism temples.

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

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

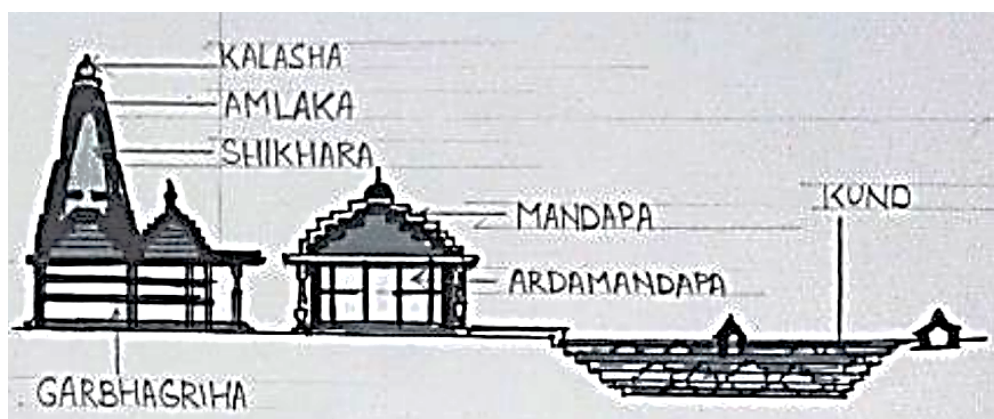
Answer : c

### Maru-Gurjara Style



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- It is also known as **Solanki style**, the style of West Indian temple architecture.
- The style originated in Gujarat and Rajasthan from the 11th to 13th centuries, under the Chaulukya dynasty (Solanki dynasty).
- Although originating as a regional style in Hindu temple architecture, it became especially popular in **Jain temples**, and mainly under Jain patronage later spread across India.'
- **Indo-Saracenic architecture**- It is also called as Indo-Saracenic Revival architecture" which was created by **British architects**, it combines exotic Islamic and Indian architecture elements with neo-classical and Gothic revival elements from the British Victorian era.
- The Chhapauk Palace, finished in 1768, is frequently cited as the first Indo-Saracenic construction.



14. "Project Kusha" often seen in the news is related to which of the following?

- a. It is a connectivity project along Assam border connecting South Asia to Southeast Asia.



- b. It is an initiative to halve the number of deaths and disability due to snakebite envenoming by 2030.
- c. It was launched to develop New Generation Launch Vehicles and thereby to build the country's own space station and send Indians to the Moon.
- d. It is an indigenous project to develop Long Range Surface to Air Missiles

Answer : d

## Project Kusha

- **Aim** - To develop India's own **Long-Range Surface-to-Air Missiles (LR-SAM)**
- **Jointly developed with** - Israel Aerospace Industries, Israel's major aerospace and aviation manufacturers
- **Range** - Hit hostile targets at 150 km, 250 km, and 350 km ranges.



- **Features** - The LR-SAM system will be a mobile platform equipped with long range surveillance and fire control radars.
- It seeks to establish a formidable **3 layered** defense system to detect and destroy incoming stealth fighters, aircraft, drones, cruise missiles and precision-guided munitions.
- It will be made capable of interacting with an integrated command and control system (IACCS), an automated air defence command and control centre used by the Indian Air Force (IAF).
- The ground systems include Igla, OSA-AK-M, Pechora missiles, Spyder quick-reaction missiles, indigenous Akash area defence missiles and the Barak-8 medium-range SAM systems.
- The Defence Research and Development Organisation (DRDO) is working on the Project Kusha to operationally deploy its own long-range air defense system by 2028-29.

Missile Defence System	Country
<a href="#">S-400 Triumf</a>	Russia
Patriot	United States
<a href="#">Iron Dome</a>	Israel

15. Consider the following statements regarding *Cervavac*

1. It is India's first indigenous and only gender-neutral quadrivalent HPV (Human Papilloma Virus) vaccine.
2. It is developed by Serum Institute of India which is yet to get approval for commercialisation.

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

## Cervavac

- It is **India's first indigenous and only gender neutral quadrivalent HPV vaccine**.
- Cervavac is an indigenously developed quadrivalent vaccine by the Serum Institute of India (SII) in Pune, is **already available commercially**.
- **Immunisation drive** - It will be conducted through schools and existing vaccination points, planned in 3 phases over 3 years and is likely to start from the 2nd quarter of 2024 for free.
- Currently, the 2-dose HPV vaccine is available commercially for about Rs 2,000 per dose.
- **Target** - Nearly 8 crore children between the ages of 9 and 14 years will be eligible and when divided over 3 years.
- At least 14 HPV types have been identified as oncogenic and among these, HPV types 16 and 18 considered to be the most oncogenic.
- **Benefits** - It offers protection against the HPV strains that cause cancer of the anus, vagina and oropharynx and genital warts.

## Cervical Cancer

- It is the **4th most common cancer** in women which develops in a woman's cervix (the entrance to the uterus from the vagina).
- **Cause** - Almost all (99%) are linked to infection with high-risk human papillomaviruses (HPV), an extremely common virus transmitted through sexual contact.
- **Prevention** - There are effective primary (HPV vaccination) and secondary prevention approaches.
- **Treatment** - It is a treatable form of cancer, as long as it is detected early and managed effectively

16. Consider the following regarding All India Survey of Higher Education (AISHE) 2021-22 Report:

1. There is higher share of enrolment in government institutions.
2. A marginal decrease in enrolment of females across India.
3. Tamil Nadu has the highest Gross Enrolment Ratio (GER).
4. Graduation rate in arts and social sciences streams is higher than others.

How many of the statement(s) given above is/are correct?

- a. Only one
- b. Only two
- c. Only three
- d. All four

Answer : b

## AISHE

*All India Survey of Higher Education (AISHE) 2021-22 was made public recently.*

- **Initiated in** - 2011.
- **Aim** - To give complete picture of Higher Education in the country.
- **3 Categories** - Universities, Colleges and Stand-alone institutions.
- **Data source** - Voluntary uploading of data by institutions of Higher Education listed in [www.aishe.gov.in](http://www.aishe.gov.in) portal.
- **AISHE 2021-22** - It was the 11th Survey and 1st Survey conducted through Web Data Capture Format (DCF).

## Key takeaways of AISHE 2021-22

- **There is increase in enrolment** - 4.33 crore students, up from 2020-21 level, captured in 8

different levels.

- **Primacy of government institutions - 73.7% of all students attend government universities**, where state public universities have the largest share of enrolment, accounting for around 31%.
- **Higher enrolment of females** - It has steadily increased to 2.07 crores in 2021-22, a 32% jump from 2014-15 levels with the highest numbers at the post graduate level, 55.4% are women.
- **Gender Enrolment Ratio** - It is 28.4 for the age group 18-23 years at all India level (population data from the 2011 census) and is in favour of women in 26 states and Union Territories.
- **Chandigarh boasts of the highest GER (64.8%)**, followed by Puducherry, Delhi and Tamil Nadu.
- **Gender Parity Index** - It is 1.01 at all-India level, and for SC and ST categories, it is 1.01 and 0.98 respectively.
- **Higher preferences for Arts** - In UG, Bachelor of Arts (BA) and in PG, Master of Arts (MA) programme has the highest enrolment.
- **Demographics of students graduating** - Among the graduated students, roughly 50.8% are women and the **graduation rate in arts and social sciences streams is higher than others**.
- Category-wise, around 35% of the students belong to OBC, 13% are from SC and 5.7% are from ST community.

## GER & GPI

- **Gross Enrolment Ratio (GER)** indicates how many students are part of the higher education system in a given population.
- Gender Parity Index (GPI) shows the ratio of the female GER to male GER. A GPI of 1 indicates parity between the two genders, GPI greater than 1 indicates a disparity in favour of females.

17. Consider the following statements with respect to Global Snow Leopard and Ecosystem Protection Programme (GSLEP)

1. It is an alliance between 12 snow leopard range countries, organizations and communities to protect the snow leopard and its mountain ecosystems.
2. It aims to achieve the goals of the Bletchley Declaration.
3. India is one among the 12 snow leopard range countries and a member of GSLEP.

How many of the statement(s) given above is/are correct?

- a. Only one
- b. Only two
- c. Only three
- d. None

Answer : b

## Global Snow Leopard and Ecosystem Protection Programme (GSLEP)

- GSLEP is an **alliance of 12 snow leopard range countries**, multi-lateral institutions, NGOs, scientists and local communities.
- It seeks to address high-mountain development issues using the conservation of the charismatic and endangered snow leopard as a flagship.
- The **Bishkek Declaration** is a 2013 pledge by 12 countries to ensure the well-being of snow leopards and the people who live among them.
- Secure 20 by 2020 is an initiative of GSLEP that identified and aims to secure at least 20 snow leopard landscapes across the cat's range by 2020.
- **The 12 snow leopard range countries are Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan (Kyrgyz Republic), Mongolia, Nepal, Pakistan, Russia, Tajikistan and Uzbekistan.**

- **Bletchley Declaration aims to enhance global collaboration on Artificial Intelligence (AI) safety.**



18. Consider the following statements with respect to Wetland City Accreditation

1. It is a voluntary system that recognizes cities which have taken exceptional steps to safeguard their urban wetlands.
2. It is established under the Ramsar Convention.
3. No Indian city have been formally accredited in the Wetland City Accreditation.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None

Answer : c

## Wetland City Accreditation

*The Ministry of Environment, Forest, and Climate Change selected Indore, Bhopal and Udaipur to get accredited for Wetland City Accreditation under the Ramsar Convention.*

- Wetland City Accreditation (WCA) aims to promote the conservation and wise use of urban and peri-urban wetlands, as well as sustainable socio-economic benefits for local populations.
- The Accreditation seeks to encourage cities that are close to and dependent on wetlands, primarily Wetlands of International Importance.
- The **Ramsar Convention** during COP12 held in the year 2015 approved this voluntary WCA system that recognizes cities that have taken exceptional steps to safeguard their urban wetlands.
- This **voluntary scheme** provides an opportunity for cities that value their natural or human-

made wetlands to gain international recognition.

- **No Indian city have been formally accredited in the Wetland City Accreditation.**
- **Criteria** – A city to get accredited formally for Wetland City Accreditation should satisfy the standards used to implement each of the 6 international criteria mentioned Operational Guidance for WCA of the Ramsar Convention on Wetlands.
- **The Amrit Dharohar** – Is an initiative of the MoEF&CC that aims to achieve similar goals by promoting unique conservation values of Ramsar Sites.

19. NUTEC Plastics, sometimes seen in the news, is an initiative of?

- a. International Atomic Energy Agency (IAEA)
- b. United Nations Environment Programme (UNEP)
- c. International Union for Conservation of Nature (IUCN)
- d. World Wide Fund for Nature (WWF)

Answer : a

### NUTEC Plastics Initiative

*International Atomic Energy Agency and the Argentine Antarctic Institute (IAA), under the IAEA's NUTEC Plastics Initiative conducted a study about effects of micro-plastics in the Antarctic.*

- **NUTEC Plastics is a flagship initiative by the International Atomic Energy Agency (IAEA).**
- It aims to address the global challenge of plastic pollution.
- It brings together *countries and partners* from around the world to fight plastic pollution on 2 fronts:
  - At point of source, by introducing new technologies to improve plastic recycling.
  - In the ocean, where the bulk of plastic waste ends up.
- 63 countries are participating in marine monitoring of micro-plastics and 30 around the world are developing innovative recycling technology.
- *India is part of the NUTEC Plastics Initiative.*

20. Which of the following countries are part the Lithium Triangle?

1. Argentina
2. Chile
3. Bolivia
4. Peru
5. Brazil

Select the correct answer using the codes given below:

- a. 1, 2 and 3 only
- b. 2, 3 and 4 only
- c. 1, 2 and 5 only
- d. 1, 2, 3, 4 and 5

Answer : a

### Lithium Triangle

*India is all set to invest about INR 200 crore to explore and develop 5 lithium blocks in Argentina which is a part of the Lithium Triangle.*



- Lithium Triangle includes countries such as **Argentina, Chile and Bolivia**.
- *It accounts for more than half of the world's total lithium resources.*
- Argentina has the second largest lithium resources in world.
- India's Khanij Bidesh India Limited (KABIL) and Argentina's state-owned enterprise of Catamarca province have forged an agreement to explore lithium.

