

1. **Growth in India Sprint, not marathon???**

Economic policies, specifically fiscal policy, have played a key role in shaping the post-pandemic growth recovery. The fiscal policy transitioned from a focus on welfare during the pandemic towards a public investment-driven growth strategy to accelerate a buildup in infrastructure. This was achieved while staying on the glide path of a reducing fiscal deficit/gross domestic product (GDP) ratio. The first advance GDP estimates from the National Statistical Office (NSO) indicate that the Indian economy will grow 7.3% this fiscal year, faster than the Economic Survey's prediction of 6.5% made in January 2023. In this context, the Interim Budget presented recently needs to accommodate various issues left unaddressed to maintain the forecast growth momentum.

Interim Budget

- Interim Budget is a statement that comprises detailed documentation of every expense that the government will incur and every penny that the government will make in the coming few months until the new government comes into power. It also includes income and expenses, made in the previous fiscal year.
- It is different from the regular budget on the following aspects:
 - The interim budget includes documentation of expenses until the upcoming elections are held, whereas a regular budget includes estimates of expenditure for the full year.
 - Also generally, major policy changes are not announced in the interim budget.
- An outgoing government presents only an interim Budget or seeks a vote on account.
 - An Interim Budget is not the same as a "Vote on Account". While a "Vote on Account" deals only with the expenditure side of the government's budget, an Interim Budget is a complete set of accounts, including both expenditure and receipts.

Current Scenario of India's Growth Trajectory

- Government's Investment Strategy: Investment has outpaced GDP growth, reaching 34.9% this year. However, there is a call for the government to moderate budgetary support to capital spending to achieve the targeted fiscal deficit of 4.5% of GDP by 2025-26.
- Fiscal Consolidation in Election Year: Achieving fiscal consolidation in an election year is crucial for the government. The review document of

the Ministry of Finance expects close to 7% growth next fiscal, with potential for India to become a \$7 trillion economy by the end of the decade.

- **Healthy Medium-Term Forecasts:** Healthy medium-term growth prospects are also reflected in the forecasts of multilateral agencies. GDP growth is expected to moderate to 6.4% next fiscal, before accelerating thereafter, due to slowing global growth and tighter financial conditions globally and at home.
- **Inflationary Concerns:** Unlike advanced countries, core inflation has corrected quickly in India to 3.8% and Fuel inflation is at -1%.
 - India's headline inflation is yet to be brought under control, solely due to high food inflation. The underperformance of the agriculture and rural economy, coupled with high food inflation, can be worrisome.
- **Climate Change and Economic Impacts:** Year 2023 marked the highest annual temperature in recorded history, reminding the escalating climate risk. India is among the most climatically vulnerable countries.
 - The Ministry of Finance's review emphasises the need for research, development, and measures to adapt to climate change without compromising economic growth.
- **Monsoon:** While the overall rainfall was 6% below the expected during the monsoon season (due to 36% deficit rains in August, 2023), the spatial distribution is quite even. Out of 36 states/UTs, 29 received normal/above-normal rains.
 - The SBI Monsoon Impact Index, which considers the spatial distribution, has a value of 89.5 in 2023, faring much better than the full season index value of 60.2 in 2022 (a better monsoon implies better agricultural productivity).
- **Continuous Thrust on Capital Expenditure:** During the first five months of the year 2023, the capital expenditure of the states as a percentage of the budgeted target was at 25%, while the Centre's was at 37%, which was higher than the previous years and reflecting renewed capital generation.
- **New Company Registrations:** The robust new companies' registration depicts strong growth intentions. Around 93,000 companies were

registered in the first half of 2023-24 as compared to 59,000 five years back.

- It is interesting to note that the average daily registration of new companies increased to 622 in 2023-24 (an increase of 58%) from 395 in 2018-19.
- Reclassified India's Exchange Rate Regime: The International Monetary Fund (IMF) has classified India's exchange rate regime, labelling it a "stabilised arrangement" instead of "floating," indicating a shift in the perception of how India manages its currency.
 - In a stabilised arrangement, the government fixes the exchange rate, whereas in a floating exchange rate system, it is determined by the demand and supply forces in the foreign exchange market.
- Declining Current Account Deficit (CAD): India's CAD declined to 1% of GDP in the second quarter of 2023, down from 1.1% in the preceding quarter, and 3.8% in 2022.
 - The CAD decreased to USD 8.3 billion in the September quarter of 2023-24 against a deficit of USD 9.2 billion in the preceding three months, according to the Reserve Bank of India (RBI) data.
 - In the second quarter of 2022-23, the current account balance recorded a deficit of USD 30.9 billion.

Major Challenges for the Indian Economy in 2024

- Global Economic Integration: India's growth is not solely determined by domestic factors but is also influenced by global developments. Rising geopolitical events, therefore, could be a threat to India's growth.
 - Increased geoeconomic fragmentation and the slowdown of hyper-globalisation are likely to result in further friend-shoring and onshoring, which are already having repercussions on global trade and, subsequently, on global growth.
- Energy Security vs Transition: A complex trade-off exists between energy security and economic growth versus the ongoing energy transition. This issue, surrounding geopolitical, technological, fiscal, economic, and social dimensions, requires careful consideration.
 - Policy actions taken by individual countries in pursuit of energy goals can have spillover effects on other economies.

- **Artificial Intelligence (AI) Challenges:** The rise of AI also poses a huge challenge, especially in the services sector, as highlighted in an IMF paper and also highlighted in the report of Chief Economic Advisor (CEA) of India.
 - This was mentioned in the IMF paper estimating that 40% of global employment is exposed to AI, with the benefits of complementarity operating beside the risks of displacement.
- **Rising Inflation:** Another major challenge that the government faces is the impact of rising inflation on the broader economy.
 - Inflation affects growth by changing the labour supply and demand, and thus reducing aggregate employment in the sector that is subject to increasing returns. The reduction in the level of employment will reduce the marginal productivity of capital.
- **Requirement of Skilled Workforce:** Ensuring the availability of a talented and appropriately skilled workforce to the industry, age-appropriate learning outcomes in schools at all levels and a healthy and fit population are important policy priorities in the coming years will remain a challenge. A healthy, educated and skilled population augments the economically productive workforce.
 - While the employable percentage of final-year and pre-final-year students increased from 33.9% in 2014 to 51.3% in 2024," as per the findings of the Wheebox National Employability Test, there is still much that needs to be done.
- **Geopolitical Tensions:** Maintaining high exports will not be easy in the current times for the country because of persisting geopolitical tensions, including recent events in the Red Sea, that further aggravated slower growth in global trade in 2023.
 - Iran-backed militant group Houthis' attack on shipments in the Red Sea have forced many nations, including India, to divert their cargo away from the troubled routes to longer and costlier ones.
 - Some estimates stated India's exports could be lower by USD 30 billion in the ongoing fiscal due to the crisis in the Red Sea.

Reforms Required for Robust Economic Growth in 2024

- **Moving Towards Fiscal Consolidation:** India's general government debt to GDP ratio was at 82% of GDP in 2022-23, with interest payments at around 17% of the total expenditure. This leaves limited scope for

more productive government spending. Hence, it is very important that the government continues to focus on fiscal consolidation and move towards a sustainable debt trajectory.

- Robust direct tax collections and higher dividend transfers from the RBI and public sector undertakings are likely to compensate for lower divestment this year.
- With healthy tax buoyancy, a budgeted fiscal deficit target of 5.3% for 2024-25 is expected as the government moves forward on the glide path of achieving a fiscal deficit of 4.5 % for 2025-26.
- Continuing Focus on Capital Expenditure (Capex): Given the strong multiplier effect of capex on growth, the focus on capex must continue in the forthcoming years. It is expected of the capex to grow by 10% to around Rs 11 trillion, with a continued focus on infrastructure.
 - Post the pandemic, the government has increasingly used capex as a means of propelling growth. The government capex to GDP ratio is budgeted to increase to 3.4 % in 2023-24.
 - The government in the last two years has also budgeted for interest-free loans amounting to Rs 2.3 trillion to state governments for capex.
- Need to Spur Consumption: The revival in consumption has been relatively weak and appears to be skewed towards the upper-income category. While GDP is estimated to grow by 7.3% in FY24 (as per advance estimates), consumption growth is estimated at only 4.4%.
 - A revival in domestic demand becomes even more critical given the poor external demand scenario. Even while being cognisant of the fiscal limitations, there is a need to come up with measures to spur consumption demand.
 - For instance, a small cut in excise duty on petrol/diesel by Rs 2-3/litre will provide some fillip to consumption and help contain inflation, without significantly disturbing the fiscal mathematics.
- Increased Spending on Human Capital: For many European countries, government spending on social services is more than one-fifth of GDP. Given that a large part of India's population is dependent on the government for these services, it is critical to increase the spending on these services.

- India is in a unique position of enjoying a large working-age population at a time when most economies are struggling with an ageing population. However, for the economy to enjoy the demographic dividend, the government must invest in human capital.
- This requires a significantly higher expenditure on health, education and skilling so that the working-age population is equipped to be meaningfully employed.
- Focus on Agriculture and the Rural Sector: Rural India is home to 65% of the country's population and has a large dependence on the agriculture sector. India's agriculture productivity in terms of Gross Value Added (GVA) is a third of that in China and around 1% of that in the US. Measures to improve productivity in the sector will help improve rural incomes.
 - This could be done through the adoption of the latest technology and by boosting rural infrastructure. Appropriate skilling of the rural workforce and enabling them to move to the manufacturing and services sectors will also help to reduce the large reliance of the rural workforce on the farm sector.
- Focus on Contemporary Issues: The need to create an enabling environment for businesses to thrive, the focus on environment-related issues, and the upliftment of the marginalised section of society are some other issues that must be provided adequate focus.
 - This is the time to focus on the quality of growth to ensure that it is equitable, sustainable and green.

The first advance GDP estimates project a robust growth of 7.3% in the Indian economy, surpassing earlier predictions despite global uncertainties. The government's fiscal policies, transitioning from pandemic-focused welfare to public investment, have enhanced economic capacity, reflected in increased investment. However, there's a need to moderate budgetary support to capital spending for fiscal consolidation. Managing food inflation, adapting to climate change, and maintaining macroeconomic fundamentals are vital for sustained growth, presenting policymakers with a challenging yet imperative task.

2.

Stupa Architecture

- A **stupa** (literally “heap” or “pile”) is a reliquary, a shrine containing the remains of a holy or sainted person and/or artifacts (relics) associated with them, originating in India prior to the 5th century BCE as tombs of holy men and evolving afterwards into sacred sites dedicated to the Buddha (l. c. 563 – c. 483 BCE).
- Later, **stupas were also raised to honor Buddhist arhats (saints), bodhisattvas (enlightened ones), other saintly figures, or local deities.** A stupa is a **hemispherical structure**, with a spire at the top, sometimes situated on a base that varies in shape and size (depending on the designated purpose of that particular stupa) surrounded by a walkway for visitors.
- **Buddhism was the earliest Indian religion to require large communal spaces for worship.**
- This led to **three types of architectural forms** the **stupa, the vihara and the chaitya.**
- Many religious Buddhist shrines came up between the 1st century BC – 1st century AD.
- The **term stupa has been referred to in Rig Veda but not in the context as we know it.** The term then referred to the **fire coming out of the sacrificial altar.**
 - **Rigveda refers to a Stupa raised by the King Varuna** above the forest in a place having no foundation.
 - **Pali word “Thupa” means a conical heap, a pile or a mound** or a conical or bell shaped shrine containing arelic.
- Stupa, originally the **focus of a popular cult of the dead, is a large burial mound containing a relic of the Buddha.**
- **It celebrates the Buddha’s parinirvana (end of cycle of suffering),** symbolizes his eternal body, and is an object of worship.
- There is evidence of community patronage of landowners, merchants, officials, monks, nuns and artisans associated with these Buddhist projects.
- **Initially stupas were Buddha’s relic places.** Then it got **extended to his followers as well and gradually stupa itself became an object of worship.**

- **Some stupas, such as the Great Stupa at Sanchi, India, or the Boudhanath Stupa at Kathmandu, Nepal,** are large, ornate structures while others are more modest.
- The **construction of stupas, on a large scale and associated with Buddhism, began throughout India during the reign of Ashoka the Great (268-232 BCE) of the Mauryan Empire (322-185 BCE)** after his conversion to Buddhism.
- **Prior to Ashoka's reign, there were eight stupas (or ten, according to some scholars) dedicated to the Buddha (and containing his cremated remains) at different sites,** which correlated to important events in his life. In an effort to spread Buddhism and encourage the enlightenment of his subjects, Ashoka had the remains disinterred and ordered the construction of **many more** (84,000, according to legend), each one receiving a certain allotment of the remains which empowered the structure with mystical energy.
- **Buddhist stupas are only one type, as there are also Hindu and Jain stupas, but Buddhist stupas remain the most popular, and their construction, worldwide, has been the most prolific.**
- Stupas exist in countries around the world, from **India to Sri Lanka, Nepal, China, European nations, Australia, the United States, and more.** Whichever culture raises one of these structures, its purpose is always the same: to provide a sacred space for people to center themselves on higher thoughts and revitalize themselves spiritually.
- After the demise of Buddha and his cremation at Kushinagar and later the **corporeal relics was distributed among 8 Mahajanapadas.**
- **Initially 8 Stupas (Saririka Chaityas) were constructed at 8 centres → Rajagrihya, Vaishali, Kapilavastu, Allakappa, Ramagrama, Vethadipa, Pava and Kushinagara.**
- **Drona the Brahmin who initiated the distribution, himself erected a Stupa** to enshrine the urn that was used to divide the relics.
- **Mauryas** arrived too late for a share of the relic and were given the wood ashes from the cremation pyre, and **they too built a Stupa in their city of Pippalavana.**
- **Thus all together 10 Stupas were erected i.e. 8 on corporeal relics and two on urn and over wood ashes by Drona and the Mauryas respectively.**

- Stupa is the built on the **relics of buddha** like his **bodily remains and objects used by him**.
- They were built by the donations of king specially of **Satavahanas**; guilds such as **ivory workers; men and women, bhikkhus and bhikkhunis**.
- **Jatakas mentions about the existence of Stupa** but does not throw any light on the structural details of Stupa.
- **Sujata Jataka and Bahiya Sutta describes Stupas as raised earthen mounds to commemorate the deceased** → This indicates that most probably prior to Ashoka most of the stupas were made of clay.
- Archaeological excavations and findings proved that **during Ashoka's reign use of bricks and stone for constructional purpose became popular**. Predecessors of Ashoka like **Bimbisara and Ajatsatru both had constructed a number of Stupas in honour of the Buddha** which contained relics of Buddha.
- With the emergence of **Mahayana sect it was not necessary that all the Stupas contained relics. It was taken over by the image worship**, with the transformation from non-iconic to iconic for changes were also found in the architectural patterns.
- **After Ashoka none of the Mauryan ruler showed any interest in propagating Buddhism**. Then the Sungas gave a new dimension to the Stupa architecture. **During Sunga and Ikshvakus period enlargement and additions were made in the existing Stupas of Sanchi, Bharhut and Amravati**.

Meaning, Function & Structure of Stupa

- The fundamental basis of Buddhism is that **life is suffering: one suffers for want of what one does not have but, once one has that thing, suffers for fear of losing it and, once it is gone, suffers the loss**.
- As long as one lives, one will suffer in this way but, the Buddha realized, **there was a way to stop suffering, and this was to change the way one interpreted the world and one's self**. Through an understanding of the **Four Noble Truths, and practicing the precepts of the Eight-Fold Path**, one could elevate one's understanding of existence, control one's thoughts and actions, and live at peace with one's self and others.

- All that one **desires, fears losing, and mourns for are ephemeral** – they were not made to last – and so are without final meaning; one should, therefore, appreciate these aspects of life for what they are but not cling to them since it is their nature to appear for only a short time and then vanish. The **Buddhist stupa is a physical manifestation of this understanding which invites adherents to both center and elevate themselves through various rituals or simply by gathering and focusing their energies at the site.**
- The **physical appearance of the stupa is intended to elevate the mind.** The **top spire (yasti) symbolizes the axis mundi (axis of the world)**, the line through the center of the earth which the universe revolves around. It is also thought to represent the World Tree whose roots are deep within the earth and branches in heaven, a symbol common in many cultures around the world. The **yasti is surrounded by a square gate known as the harmika**, and over the yasti and harmika are **parasols which symbolize protection, majesty, and the Buddha himself.**
- The large hemisphere descends from the yasti to a **platform or base, sometimes square**, which is often surrounded by a wall with **four gates (toranas) corresponding to the four cardinal directions.** These directions, in turn, relate to four events in Buddha's life:
 - **East – Birth of Buddha**
 - **South – Enlightenment of Buddha**
 - **West – First Sermon of Buddha**
 - **North – Nirvana/Release from Samsara of Buddha**

Basic structure of Stupa

- The stupa consists of a **square platform** known as **medhi**.
- On medhi there is a hemispherical structure which encloses a casket.
- The medhi is surrounded by **vedika(boundary wall)**.
- **Between the medhi and the vedika was pradakshina path or the circum-ambulatory.**
- On the stupa there was **harmika** followed by **one or more chatris** which signified '**axis mundi**' or **axis of the world.**

3. **Folk paintings of India**

Folk Paintings is a visual representation of a particular group of people's common culture and contains customs unique to that culture, subculture, or group.

Madhubani Paintings

- Madhubani painting is a style of painting, **practiced in the Mithila region of Bihar state.**
- Themes revolve around **Hindu Gods and mythology, along with scenes from the royal court and social events like weddings.**
- Generally **no space is left empty**; the **gaps are filled by paintings of flowers, animals, birds, and even geometric designs .**
- Paintings are traditionally done on **freshly plastered mud walls and floors of huts**, but now they are also done on **cloth, hand-made paper and canvas.**
- Since there was **no shading**, the paintings are **two-dimensional**. Some of the common features of these paintings include **double line border, bold use of colours, ornate floral patterns and exaggerated facial features.**
- Painting is done with fingers, twigs, brushes, nib-pens and matchsticks, using natural dyes and pigments.
- Traditionally done by women by the region uses **bright earthy colors.**
- Characterized by **eye-catching geometrical patterns.**
- There are paintings for **each occasion and festival such as birth, Holi, Kali Puja, etc.**
- The figures in the painting were **symbolic**. For example, **fish depicts good luck and fertility.**
- The origin of Madhubani paintings is believed to be during the **period of Ramayana**, when the King of Mithila told people of his kingdom to paint walls and floors of their houses on the **marriage of Sita and Rama.**
- Mostly **women have passed on the skill of Madhubani painting from generations to generations.**
- In 1970, this art got recognition, when the President of India honoured **Jagdamba Devi**. Apart from her, other famous painters associated with this include Baua Devi, Bharti Dayal, Ganga Devi, Mahasundari Devi and Sita Devi.
- Since the art has remained confined to a specific geographical area, **it has been given GI (geographical indication) status.**

Pattachitra Paintings

- Pattachitra is a general term for **traditional, clothbased scroll painting, based in the eastern Indian state, Odisha**. In the Sanskrit language, “Patta” literally means “cloth” and “Chitra” means “picture”.
- These paintings are **based on Hindu mythology** and specially inspired by **Jagannath and Vaishnava sect**, sometimes from Shakti and Shaiva cults also.
- Paintings are done on **small strips of cotton cloth**. The canvas is prepared by **coating the cloth with a mixture of chalk and gum made from tamarind seeds**. Women traditionally make this gum and application.
- The master hand, mostly the male member, draws the initial line and gives the final finishing.
- The painting is held over a **fire-place** so that the back of the painting is exposed to heat. On the surface of the painting fine lacquer is applied.
- **Natural colours** are used. **No pencil or charcoal is used**.
- **Tala Pattachitra** is one variant of this form, **drawn on palm leaf**.

Kalighat Paintings

- Kalighat paintings originated in the **19th century Bengal**, in the vicinity of **Kalighat Kali Temple, Kolkata, India**.
- From the **depiction of Hindu gods**, god, and other mythological characters, the Kalighat paintings developed to reflect a variety of themes.
- An important achievement of the Kalighat artistes was that they made simple paintings and drawings, which could easily be reproduced by **lithography**. Such prints were then hand coloured.
- The charm of the Kalighat paintings lies in the fact that they captured the essence of daily life and they influence modern artistes like the late **Jamini Roy** even to this day.
- One of the features is use of **water color**.

Warli Paintings

- The name of the painting comes from the people who have been carrying the painting tradition that goes back to 2500-3000 BC. **They are called the Warlis, indigenous people that occupy mainly the Gujarat-Maharashtra border**.

- It is **vivid expression of daily & social events of Warli tribe**, used by then to embellish the walls of village houses.
- It **uses very shapes: a circle, a triangle and a square**. The **circle represents the sun and the moon**, the **triangle derived from mountains and pointed trees**, the **square indicates a sacred enclosure or a piece of land**.
- Human and animal bodies are represented by **two triangles joined at the tip**; the upper triangle depicts the **trunk** and the lower triangle the **pelvis**. Their precarious equilibrium symbolizes the **balance of the universe**.
- The **base is made of a mixture of mud, branches and cow dung that gives it a red ochre colour**. For painting only white pigment is used, which is made of a mixture of gum and rice powder.
- The wall paintings are usually done for **auspicious occasions like harvests and wedding**. With time, the popularity of Warli painting has resulted in these being painted on a cloth on a base of red or black background using white poster colour.
- These paintings have **close resemblance to the mural paintings of Bhimbetka** in Madhya Pradesh.
- These ritualistic paintings have a **central motif of a chaukat or chauk**, which is surrounded by scenes portraying fishing, hunting, farming, dances, animals, trees and festivals. Among the Goddesses, **Palaghata (goddess of fertility)** is drawn and among the male gods, those spirits that have taken human form are represented.

Paitkar Paintings

- The Paitkar paintings are also popularly known as the **scroll paintings of Jharkhand**.
- This old form of painting has cultural **association with Ma Mansa**, one of the most popular goddesses in tribal household.
- The **tribal artists in Jharkhand** have fostered this art of scroll painting that has long been used in **storytelling performances and in socioreligious customs**.
- The paintings that belong to this form have a common subject of **'what happens to human life after death'**.
- In Santhal tribe of Jharkhand, **Jadu Patua or Paitkar painting** is considered to have the **capacity to send the wandering souls of the dead to heaven, and thus, help to free them of all pain**.

Patna Kalam Painting

- Patna School of Painting (also **Patna Qalaam, or Patna Kalam**) is a style of Indian painting which existed in Bihar, India in the 18th and 19th centuries.
- Patna Qalaam was the **world's first independent school of painting which dealt exclusively with the commoner and their lifestyle** which also helped Patna Kalam paintings gain in popularity.
- The Principal centers were **Patna, Danapur and Arrah.**
- **Origin:**
 - Patna Kalam is an **off-shoot of Mughal painting.** The Mughal style of painting matured in the regime of **Jahangir**, and his period was considered the golden era of Mughal paintings, but **during the rule of Aurangzeb in the late 17th and early 18th century, artisans faced mass prosecution and aversion in art and painting.**
 - The **painters migrated from Delhi** looking for shelter in different places. **One such group moved eastward and landed in Murshidabad under the patronage of the Nawab of Bengal** and other local aristocrats, though British patrons were also important.
 - In the mid-18th century, **after the fall of The Nawab of Bengal and the subsequent decline of Murshidabad, the artisans started moving to the next biggest city in the east, Patna.** In Patna they came under the patronage of local aristocracy and often Indophile scions of the early **East India Company.**
- Unlike Mughal paintings, which focused on royalty and court scenes, **flag bearers of Patna Kalam were deeply influenced by the daily life of the common man, also a common subject in Company painting.**
 - Their main subjects were local festivals, ceremonies, bazaar scenes, local rulers, and domestic activities. The paintings were done on diverse surfaces such as paper, mica, and even ivory diskettes, that were used as brooches.
- **A distinguishing characteristic of Patna Kalam is the lack of any landscape, foreground or background.** Another characteristic was the **development of the shading of solid forms.**

- Patna Kalam paintings are **painted straightway with the brush without marking with a pencil to delineate the contours of the picture and the procedure of painting is popularly known as 'Kajli Seahi.**

Kohvar and Sohrai Paintings

- Belong to the **state of Jharkhand.**
- These paintings are **practiced exclusively by married women, during weddings and at harvest time**, and the traditional skill is passed on to younger females of the clan.
- **Comb cut or finger painted, Kohvar art celebrates marriage**, and the **wall painted Sohrai celebrates bumper crops.**

Kalamkari Paintings

- Kalamkari is a painting **done by kalam (pen).** These paintings are **made in Andhra Pradesh.** It is **hand painted as well as block printing with vegetable dyes applied on cloth.** Vegetable dyes are used for colour in the Kalam Kari work. The **pen used is made of sharp pointed bamboo**, used to regulate the flow of colours.
- A small place **Sri-Kalahasti is the best known centre of Kalamkari art.** This work is also found at **Masulipatnam in Andhra Pradesh.**
- Owing to Muslim rulers in Golconda, the **Masulipatnam kalamkari was widely influenced by Persian motifs and designs.**
- This art is mainly related to **decorating temple interiors** with painted cloth panels, which was developed in the fifteenth century under the patronage of **Vijaynagar rulers.**
- **Subjects are adopted from the Ramayana, the Mahabharata and Hindu religious mythology.** This art form is a continuous legacy from father to son.
- The **outlines and main features are done using hand carved blocks.** The **finer details are later done using the pen.**

Phad Paintings

- It is a type of scroll painting famous in the **state of Rajasthan, mainly found in the Bhilwara district.**
- It is religious in nature and comprises of **drawings of local deities, Pabuji and Devnarayan.**
- Painted with vegetable colours on a **long piece of cloth called phad**, they are 15 ft or 30 ft long. The subjects have large eyes and round faces.

- These paintings are created using **bright colours and subtle colours**. The outlines of the paintings are first drawn in black and later filled with colours.
- The main themes of the phad paintings **depict the deities and their legends and the stories of erstwhile Maharajas**.
- The unique features of phad paintings are the **bold lines and a two dimensional treatment of figures with the entire composition arranged in sections**.

Manjusha Paintings

- Manjusha art is the **folk art of Ang region which is based on Folklore of Bihula-Bishari. Ang region in modern era known as Bhagalpur (Bihar)**.
- These paintings are **executed on boxes of jute and paper**. It has a sequential representation of the story and is displayed in a series. This is also called a **scroll painting**.
- It is often referred to as **Snake Paintings by foreigners as swirling snakes in the art depict the central character Bihula's tale of love and sacrifice**.

Thangka Paintings

- It is a **Tibetan Buddhist painting on cotton, or silk**, usually depicting a Buddhist deity, scene, or mandala.
- Presently belonging to **Sikkim, Himachal Pradesh, Ladakh region and Arunachal Pradesh, Thangka were originally used as a medium of reverence that evoked the highest ideals of Buddhism**. Traditionally made by Buddhist monks and particular ethnic group, the skill of these paintings has been passed from one generation to the other.
- **Thangkas are painted on a base of cotton canvas (white background) with paints made from natural vegetable dyes or mineral dyes**. The **colours used in the paintings have their own significance**.
 - For example, red stands for intensity of passion, be it love or hatred, golden is for life or birth, white is for serenity, black depicts anger, green represents consciousness and yellow shows compassion.
 - Once the painting is done, it is often framed in colourful silk brocade.

- Thangkas are traditionally kept **unframed and rolled up** when not on display, mounted on a textile backing somewhat in the style of Chinese scroll paintings.
- Because of their delicate nature, they have to be kept in **dry places** where moisture will not affect the quality of the silk.
- Most Thangkas were intended for **personal meditation or instruction of monastic students**. They often have elaborate compositions including **many very small figures**. A central deity is often surrounded by other identified figures in a symmetrical composition.
- Thangka serve as important **teaching tools depicting the life of the Buddha, various influential lamas and other deities and bodhisattvas**.

Patua Art Paintings

- Patua scroll painting is an art form **native to West Bengal**.
- It started out as a village tradition by painters telling **Mangal Kavyas or auspicious stories of Hindu Gods and Goddesses**.
- These paintings are done on **pats or scrolls and for generations**, the scroll painters or patuas have been going to different villages to sing their stories. **Most Patuas are Muslims**.
- The paintings are traditionally made from handmade paper, backed with cloth.
- Scrolls are typically **8 to 15 feet long** and contain vibrantly painted scenes of a **mythology or history story**. As the scroll is unrolled frame by frame, the artist narrates mythological and historical stories through **song**, which typically lasts five to fifteen minutes.
- Traditionally these were painted on cloth and told **religious stories**; today they are painted with poster paints on sheets of paper sown together, usually to comment on **political and social issues**.
- These Patuas mostly come from **Medinipur region, Murshidabad, North and South 24 Parganas and Birbhum districts**.

4. **Finding light in Myanmar's darkness**

In a recent development, the Indian Home Minister has unveiled the decision to fence the entire length of the India-Myanmar border to stop the free movement of people. This decision aims to curtail the unhindered movement

of people across the 1,643 km border, traversing states such as Manipur, Mizoram, Assam, Nagaland, and Arunachal Pradesh.

The current **Free Movement Regime (FMR)** agreement with Myanmar is under review as part of this initiative. While the fencing proposal is ostensibly rooted in security concerns, it is anticipated to face opposition and potentially generate adverse effects on the bilateral ties between the two nations.

Free Movement Regime (FMR)

- The FMR is a mutually agreed arrangement between the two countries that allows tribes living along the border on either side to **travel up to 16 km inside the other country without a visa. It was implemented in 2018** as part of the Indian government's **Act East policy**.
- **Rationale:**The partition of the India-Myanmar border traces back to 1826 when British colonial rulers demarcated the boundary without considering the opinions of the local inhabitants. The demarcation has resulted in the division of people who share strong ethnic and familial bonds across the border.
- **Significance:**In addition to fostering people-to-people interactions, the Free Movement Regime (FMR) was envisioned to boost local trade and business activities. The area has a rich tradition of cross-border commerce facilitated by customs and border haats.

India- Myanmar Relationship is significant

Geopolitical Importance:

- **Gateway to Southeast Asia:**Myanmar serves as a land bridge connecting South Asia to Southeast Asia. The proximity of Myanmar to India's northeastern states establishes a strategic link and facilitates regional connectivity.
- **Bay of Bengal Connectivity:**The maritime boundary shared by India and Myanmar in the Bay of Bengal enhances opportunities for maritime cooperation, fostering economic and strategic collaboration
- **Regional Power Balancing:**Given the geopolitical complexities in the region, a strong relationship with Myanmar helps India avoid any potential regional power imbalances that could arise from the influence of other major players. India's proactive engagement with Myanmar serves as a counterbalance to China's growing influence in the region

Strategic Significance:

- **Strategically Significant Neighbourhood:** Myanmar is a large multi-ethnic nation, located in a strategically significant neighbourhood. The developments within the nation have repercussions for its five neighboring countries: China, Laos, Thailand, Bangladesh, and India.
- **Neighbourhood First Policy:** The approach towards Myanmar under **India's "Neighborhood First" policy** underscores the significance of cultivating a robust, cooperative, and mutually advantageous association.
- **Act East Policy:** Myanmar is a key component of **India's Act East Policy**, a diplomatic initiative aimed at fostering economic, strategic, and cultural relations with the Asia-Pacific region.
- **Multilateral Engagement:** Myanmar's membership of **SAARC, ASEAN, BIMSTEC**, and Mekong Ganga Cooperation has introduced a regional dimension to bilateral relations and imparted added significance in the context of India's "Act East" policy.

Areas of Collaborative Cooperation:

- **Bilateral Trade:** India ranks as Myanmar's fifth-largest trading partner, registering bilateral trade at USD 1.03 billion in 2021-22.
 - Both nations seek to enhance bilateral trade, creating economic opportunities for industries in areas like agriculture, pharmaceuticals, information technology, and energy
- **Energy Cooperation:** Myanmar holds significance for India's energy security. With an energy portfolio of over USD 1.2 billion, Myanmar is the largest recipient of India's investment in the oil and gas sector in Southeast Asia.
- **Investment in Infrastructure:** Infrastructure projects, such as the Kaladan Multi-Modal Transit Transport Project and the Sittwe Port, aim to boost connectivity, trade, and investment.
 - **Kaladan Multimodal Transit Transport Project:** The project aims to connect the eastern Indian seaport of Kolkata with Sittwe port in Myanmar by sea.
 - **India-Myanmar-Thailand Trilateral Highway Project:** The project aims to establish a road link between the three nations, with the highway beginning in Moreh in India's Manipur state, passing through Myanmar, and ending at Mae Sot in Thailand.

- **Strategic Defense Partnership:** India and Myanmar maintain a close defense partnership, with India providing military training and conducting joint exercises with the Myanmar Army.
 - **India-Myanmar Bilateral Army Exercise (IMBAX)** is aimed at building and promoting closer relations with armies.

Capacity Building Measures:

- **Developmental assistance:** India has extended USD 2 billion in soft loans. It has offered to help Myanmar with developmental assistance in the areas it wants rather than be prescriptive.
 - India is also providing assistance in setting up institutions for higher learning and research, namely the Myanmar Institute of Information Technology, Advanced Centre for Agricultural Research and Education, etc.
 - India also offered to provide support in capacity building in disaster risk mitigation as well as in strengthening Myanmar's National Disaster Response Mechanism.
- **Humanitarian Assistance:** India's humanitarian assistance to Myanmar during crises, such as providing COVID-19-related aid, demonstrates the strength of bilateral relations and reflects a commitment to regional well-being.
 - India has responded promptly and effectively in rendering assistance following natural calamities in Myanmar like Cyclone Mora (2017), Komen (2015), and the earthquake in Shan State (2010).

Cultural Connectivity:

- **Cultural and Historical Ties:** India and Myanmar share cultural ties in terms of Buddhist heritage and shared history of colonialism. These ties form a foundation for stronger diplomatic relations and mutual understanding.
- **Indian Diaspora:** People of Indian Origin in Myanmar constitute about 4 % of the total population of the country. The Indian diaspora plays a vital role in Myanmar's economy through business ventures, trade, and investments.

Issues in India- Myanmar Relationship

- Internal Security Concern:

- India - Myanmar **border is highly porous, poorly guarded**, and located along a remote, underdeveloped, insurgency-prone region and **proximate to an opium-producing area**.
- This vulnerability has been **exploited by terrorist organizations and insurgent groups** operating in the northeastern region of India. Instances include the supply of trained personnel and the trafficking of arms through this porous border.
- Indian rebel groups from the northeast had established camps in Myanmar's border villages and towns.
 - According to a paper published by Anuradha Oinam of the Centre for Land Warfare Studies (CLAWS), several insurgent groups such as the United National Liberation Front (UNLF), People's Liberation Army (PLA), the United Liberation Front of Assam (ULFA), National Socialist Council of Nagaland (NSCN), and small groups of Kukis and Zomis have built camps in Sagaing Division, Kachin State, and Chin State (in Myanmar).
- **The Free Movement Regime (FMR):** The Indian government is considering **terminating the Free Movement Regime (FMR)** with Myanmar.
 - While advantageous for the local population and instrumental in enhancing Indo-Myanmar relations, it has faced past criticism for inadvertently facilitating issues such as illegal immigration, drug trafficking, and arms trade.
- **Triangular Power Struggle in Myanmar:** Three years post a military coup that stripped Myanmar of its modest democratic gains, the country remains entangled in internal strife.
 - **'Sick Man of Southeast Asia':** Myanmar perceives no signs of improvement, with the military regime, political entities, and ethnic organizations perpetuating the cycle of violent conflict. This civil unrest appears to offer little prospect of a decisive triumph for any party involved.
 - **Civil Liberty Index:** Myanmar has been assigned a score of 0 in the civil liberty index, which measures the extent to which citizens enjoy civil liberties.

	<ul style="list-style-type: none">▪ China's Influence:China is Myanmar's largest investor as well as the biggest trading partner. China has solidified its influence in Myanmar not only through economic ties and trade but also by leveraging soft power, particularly through significant infrastructure projects.<ul style="list-style-type: none">▪ The task of mitigating Chinese influence within Myanmar has proven challenging for India.▪ Infrastructure Project Delays:Over time, a growing trust deficit has emerged in India-Myanmar relations, attributed to India's reputation for consistently prolonging the implementation of diverse projects.<ul style="list-style-type: none">▪ The prolonged delays in the timely execution of collaborative infrastructure projects, notably the Kaladan Multi-Modal Transit Transport Project and the Sittwe port, crucial for bolstering connectivity, have become impediments to fostering economic cooperation.▪ Rohingya Crisis:The Rohingya crisis is a humanitarian and human rights tragedy that has strained the relations between India and Myanmar. They have fled to neighboring countries, especially Bangladesh and India, seeking refuge.<ul style="list-style-type: none">▪ India has cited security concerns, such as the alleged links between some Rohingya and terrorist groups, as well as the burden on its resources and social harmony, as the reasons for its stance
5.	<p>Stability -Not Political Gestures</p> <ul style="list-style-type: none">▪ Economic theory advocates for counter-cyclical fiscal strategies, urging governments to boost spending during economic downturns and reduce it during recoveries.▪ Considering the interim budget, it is important to look into India's recent fiscal policies, highlighting the government's commitment to macroeconomic stability and its implications for the country's economic growth. <p>Challenges Faced by Indian Economy After the Covid-19 Pandemic</p> <ul style="list-style-type: none">▪ Heightened Debt-to-GDP Ratio

- The fiscal landscape was significantly altered by absorbing economic losses during pandemic-driven lockdowns, resulting in a nearly 10%-point surge in the debt-to-GDP ratio.
- Recognising the implications of this heightened ratio, the government acknowledged the imperative for sustained fiscal discipline to revert to pre-pandemic levels.
- **Prolonged Impact on Interest Costs**
 - Understanding that interest costs are reflective of past deficits, the fiscal scars from pandemic-driven spending are expected to persist.
 - The government acknowledges that these scars will continue to manifest in higher interest expenses, underlining the necessity of a prolonged period of fiscal prudence.

Concerns Surrounding Deficit Financing and Liquidity

- **Sources of Deficit Financing**
 - The government's deficit financing primarily relies on two major sources: market borrowings through bonds and inflows to small-savings schemes.
 - Over the last decade, there has been a noteworthy rise in inflows into small-savings schemes, accounting for more than 2% of GDP.
- **Unchanged Fiscal Deficit and Inflows**
 - Despite an unchanged fiscal deficit in absolute terms, the government has witnessed a surge in inflows to small-savings schemes, surpassing initial expectations.
 - In FY24, inflows were nearly Rs 1.5 trillion ahead of expectations, yet the government, for FY25, assumes a decline in these flows.
- **Potential for Higher Cash Balances**
 - The conservative assumptions regarding inflows might result in the government ending the fiscal year with a cash balance significantly higher than normal.
 - An excess of Rs 3 to 4 trillion in cash balances, as observed recently, raises concerns about unintended consequences on liquidity in the banking system.
- **Unintended Impact on Monetary Policy and Borrowing Rates**

- Higher government cash balances can lead to unintended liquidity stresses in the banking system, impacting overnight borrowing rates.
- This situation, where cash balances exceed normal levels, can potentially drive borrowing rates above the intended policy stance, offsetting some gains from fiscal discipline.

The Government's Approach Highlighted in Interim Budget to Deal with Challenges Faced by Pandemic and Deficit Financing

- Defying Expectations
 - The government's fiscal approach defies initial expectations, as the fiscal deficit target of 5.1% of GDP for FY2024-25 is notably lower than even conservative economist projections ranging from 5.2% to 5.5%.
 - This unexpected restraint reflects a conscious effort to prioritize long-term economic health over short-term political gains.
 - Long-Term Commitment
 - The Finance Minister's commitment to lowering the fiscal deficit further, aiming for a target below 4.5% of GDP by FY2025-26, signals a sustained dedication to fiscal responsibility.
 - This long-term perspective is crucial for unwinding the fiscal expansion prompted by the pandemic and reinstating pre-Covid levels of economic stability.
- Ambitious Reduction in Primary Deficit Ratio
 - Notably, the targeted primary deficit ratio for FY2024-25 is set at 1.5%, representing a deliberate reduction compared to the primary deficit observed in FY20.
 - The government's ambitious target for FY2025-26, aiming for a primary deficit of 0.8% of GDP, implies a comprehensive unwinding of fiscal measures initiated during the pandemic.
- Interest Costs and Fiscal Scars
 - The acknowledgment that interest costs reflect past deficits underscores the government's awareness of the long-lasting impact of fiscal decisions.
 - The nearly 10%-point increase in the debt-to-GDP ratio during the pandemic necessitates a prolonged period of fiscal discipline

to mitigate the economic scars left by absorbing significant losses.

- Steps to Enhance the Quality of Spending and Debt-to-GDP Ratio
 - Enhancing the quality of spending is crucial to reduce the elevated debt-to-GDP ratio, allowing the state more flexibility to support growth in the event of unforeseen economic shocks.
 - The government aims to achieve this through a focus on capital expenditure, with a notable 11% year-on-year growth, signalling a commitment to long-term economic drivers.
- Credible Assumptions and Transparency
 - Credible assumptions underpin the budget, with a reasonable 10.5% nominal GDP growth assumption and consistent tax-to-GDP trends.
 - Improved transparency in budget numbers, including a reduction in extra-budgetary spending, contributes to a more reliable fiscal framework.

Way Forward

- Need for Fiscal Discipline
 - Fiscal discipline is deemed essential for an extended duration to witness a gradual reduction in the debt-to-GDP ratio.
 - The targeted fiscal deficit of 5.1% of GDP for FY2024-25, lower than anticipated, indicates a deliberate effort to curtail government spending and navigate the path towards fiscal sustainability.
 - A high debt-to-GDP ratio limits the government's ability to provide substantial support for economic growth in the event of unforeseen shocks.
 - The need for sustained fiscal discipline is thus not only a corrective measure for past excesses but also a proactive strategy to ensure resilience against potential economic vulnerabilities.
- Need for Sensible Cash Management
 - Managing the surge in inflows and consequent cash balances requires a nuanced approach to prevent unintended consequences on monetary policy.

	<ul style="list-style-type: none">▪ Sensible cash management becomes essential to strike a balance between maintaining economic stability and adhering to fiscal discipline. <p>Conclusion</p> <ul style="list-style-type: none">▪ India's fiscal strategy reflects a delicate balancing act between stimulating economic growth, reducing debt, and maintaining macroeconomic stability.▪ While the government's commitment to fiscal discipline is commendable, careful consideration of deficit financing sources and managing liquidity concerns remains crucial for sustaining the positive trajectory of the economy.
6.	<p>Mural Paintings & Cave Paintings</p> <p>A mural is a large picture painted or affixed directly on a wall or ceiling. The existence of mural paintings in India dates back to 2nd century BC to 8-10th century AD. Some of the places where this painting is found include- Ajanta, Bagh, Sittanavasal, Armamalai cave, Ravan Chhaya rock-shelter and Kailashnath temple in Ellora caves. Majority of the themes in these paintings relates to religion- Buddhism, Jainism and Hinduism.</p> <p>Ajanta paintings</p> <ul style="list-style-type: none">▪ Ajanta is the only surviving example of painting of the first century BCE and the fifth century CE▪ The subject matter of these paintings is almost exclusively Buddhist, excepting decorative patterns on the ceilings and the pillars.▪ They are mostly associated with the Jataka, collection of stories, recording the previous births of the Lord Buddha.<ul style="list-style-type: none">▪ Notable specimens<ul style="list-style-type: none">▪ The earliest paintings at Ajanta are in cave No. IX and X of which the only surviving one is a group on the left wall of cave X. This portrays a king with attendants in front of a tree decked with flags. The King has come to the sacred Bodhi tree for fulfilling some vow connected with the prince who is attending close to the king.▪ The painting of Bodhisattva Padmapani from cave I is one of the masterpieces of Ajanta Painting executed in the late 6th century CE. This beautifully ornamented

figure is more than life size and is shown stopping slightly and holding in his right hand a lotus flower.

- In cave No. XVII painted probably in circa 6th century CE is a painting representing **Buddha's visit to the door of Yashodhara's abode** in the city of Kapilavastu while she herself has come out with her son Rahula to meet the Great King.
- A beautiful depiction of a feminine beauty is the **painting of Maya Devi**, the mother of the Buddha.
- Along-side these Buddhist paintings there are also **a few Brahmanical figures** of iconographic interest: **Indra**, a Hindu divinity, is depicted flying amid clouds together with celestial nymphs holding musical instruments.
- An example of **ceiling decoration** is from cave No. XVII and belongs to circa 6th century A.D. The **pink elephant** is from the same decorative painting 'and can be seen in detail.

Bagh and Badami Cave paintings

- The paintings from **Bagh caves in Madhya Pradesh** correspond to those paintings of Ajanta in cave No. I and II.
- Stylistically both belong to the same form, but Bagh figures are more tightly modeled, and are stronger in outline.
- They are **earthlier and human than those at Ajanta**.
- The **earliest Brahmanical paintings** so far known, are the fragments found in **Badami** caves, in cave No.III belonging to circa 6th century A.D.
- The painting of **Siva and Parvati** is found somewhat well preserved.
- Though the technique follows that of Ajanta and Bagh, the modeling is much more sensitive in texture and expression and the outline soft and elastic.
- The paintings of Ajanta, Bagh and Badami represent the classical tradition of the North and the Deccan at its best.

- **Sittanavasal** and other centres of paintings show the extent of its penetration in the South.
- The paintings of Sittanavasal are intimately connected with **Jain themes and symbolism**, but enjoy the same norm and technique as that of Ajanta.
- The contours of these paintings are firmly drawn **dark on a light red ground**.
- On the ceiling of the Verandah is painted a large decorative **scene of great beauty, a lotus pool with birds, elephants, buffaloes and a young man plucking flowers**.

Ellora

- A number of Hindu, Buddhist and Jain temples were excavated from Ellora between the 8th and 10th centuries A.D. from the living rock.
- Located nearly 100 Kms away from Ajanta caves in the Sahyadri ranges of Maharashtra, it is a group of **34 caves – 17 Brahmanical, 12 Buddhist and 5 Jain**.
- These set of caves were developed during the period between 5th and 11th centuries CE by various guilds from Vidarbha, Karnataka and Tamil Nadu.
- The most impressive of these, the **Kailashnath Temple** is a free standing structure which is in fact a monolith which has several fragments of painting on the ceiling of the different parts of this temple. It was developed under the patronage of **Rashtrakuta king Krishna I** and is dedicated to **Lord Shiva**.

Other notable specimens are:

- Cave No. 10 is a Buddhist Chaitya cave known as **Vishwakarma Cave** or carpenter's cave wherein Buddha is seated in Vyakhyana Mudra here and Bodhi tree is carved at his back.
- Cave No. 14 is themed "**Raavankikhai**".
- Cave No. 15 is **Dashavatara Temple**.
- Two famous Jain caves are **Indra Sabha** (Cave 32) and **Jagannath Sabha** (Cave 33).

Badami cave paintings

- Badami was the capital of the early Chalukyan dynasty which ruled the region from 543 to 598 CE.

- The inscription in Cave No.4 mentions the date 578–579 CE, describes the beauty of the cave and includes the **dedication of the image of Vishnu.**
- **Paintings in this cave depict palace scenes.** One shows Kirtivarman, the son of Pulakesin I and the elder brother of Mangalesha, seated inside the palace with his wife and feudatories watching a dance scene.
- The paintings found here are stylistically similar to the ones found in Ajanta
- The sinuously drawn lines, fluid forms and compact composition exemplify the proficiency and maturity the artists had achieved in the sixth century CE.

Evolution of mural painting under various empires

Chola Kings

- The Pallava kings who succeeded the Chalukya kings in parts of South India, were great patrons of arts
- Mahendravarman I with numerous titles such as Vichitrachitta (curious-minded), Chitrakarapuli (tiger among artists), Chaityakari (temple builder), which show his interest in art activities
- The paintings in temples were done at his initiative, though only fragments remain.
- The **Panamalai figure of a female divinity** is drawn gracefully.
- Paintings at the **Kanchipuram** temple were **patronized by the Pallava king, Rajasimha.**
- Faces are round and large. **Lines are rhythmic** with **increased ornamentation** when compared with the paintings of earlier periods.
- Depiction of torso still remains like the earlier sculptural tradition but is elongated.
- When the Pandyas came to power, they too patronized art. **Tirumalaipuram caves and Jaina caves at Sittanvasal are some of the surviving examples.** Here, on the pillars of the veranda are seen dancing figures of celestial nymphs
- The contours of figures are firmly drawn and painted in **vermilion red on a lighter background.** The body is rendered in yellow with subtle modeling. **Supple limbs, expression on the faces of dancers, rhythm in their swaying movement, all speak of the artists' skill** in creative imagination in visualizing the forms in the architectural context.

- The paintings were executed on the walls of the narrow passage surrounding the shrine in Brihadeshwara temple
- **The paintings show narrations and aspects related to Lord Shiva, Shiva in Kailash, Shiva as Tripurantaka, Shiva as Nataraja, a portrait of the patron Rajaraja and his mentor Kuruvar, dancing figures, etc.**

Vijayanagara Murals

- The paintings at Tiruparakunram, near Trichy, done in the fourteenth century represent the early phase of the Vijayanagara style.
- In Hampi, the Virupaksha temple has paintings on the **ceiling of its mandapa narrating events from dynastic history and episodes from the Ramayana and the Mahabharata.**
- Among the important panels are the ones which show Vidyaranya, the spiritual teacher of Bukkaraya Harsha, being carried in a palanquin in a procession and the incarnations of Vishnu.
- In Lepakshi, near Hindupur, in present Andhra Pradesh, there are examples of Vijayanagara paintings on the walls of the Shiva temple
- In keeping with the tradition, the Vijayanagara painters evolved a pictorial language wherein the faces are shown in profile and figures and objects two-dimensionally.
- **Lines become still but fluid, compositions appear in rectilinear compartments.**
- These stylistic conventions of the preceding centuries were **adopted** by artists in various centres in South India as can be seen in the paintings of the **Nayaka Period.**
- Paintings of the Nayaka dynasty in the seventeenth and eighteenth centuries are seen in Thiruparakunram, Sreerangam and Tiruvarur in Tamil Nadu. In Thiruparakunram, paintings are found of two different periods—of the fourteenth and the seventeenth century. **Early paintings depict scenes from the life of Vardhaman Mahavira**
- The Nayaka paintings depict episodes from the **Mahabharata and the Ramayana and also scenes from Krishna-leela**
- In Chidambaram, there are panels of paintings narrating stories related to Shiva and Vishnu— **Shiva as Bhikshatana Murti, Vishnu as Mohini, etc**
- The examples cited above suggest that Nayaka paintings were more or less an extension of the Vijayanagara style with minor regional

modifications and incorporations. **The painting of Nataraja at Tiruvalanjuli is a good example.**

Kerala murals

- Kerala painters (during the period from the sixteenth to the eighteenth century) **evolved a pictorial language and technique** of their own while **discriminately adopting certain stylistic elements from Nayaka and Vijayanagara schools**
- The painters evolved a language taking cues from contemporary traditions, like Kathakali and **kalam ezhuthu** (ritual floor painting of Kerala), using vibrant and luminous colours, representing human figures in three-dimensionality
- The artist seems to have also derived sources from oral traditions and local versions of the Ramayana and the Mahabharata for painted narration.
- More than sixty sites have been found with mural paintings which include three palaces—**Dutch palace in Kochi, Krishnapuram palace in Kayamkulam and Padmanabhapuram palace**
- Among the sites where one can see the mature phase of Kerala's mural painting tradition are **Pundareekapuram Krishna temple, Panayanarkavu, Thirukodithanam, Triprayar Sri Rama temple and Trissur Vadakkunathan temple.**

7. **Foreign Travelers Who Visited India**

It was through the records and writings of foreign travelers, the world first heard about India and her people. Many of those travelers have documented the culture and lifestyle prevailing in the various parts of India then. India has always been the dream destination for people who want to explore one of the earliest civilizations in the world. Since time immemorial, India has received several keen travelers who came here and fell in love with its traditions and colors.

Foreign travellers at a glance

NAME (NATIONALITY)	TIME PERIOD	VISITED DURING THE REIGN OF (DYNASTY/RULER)
Deimachos (Greek)	320-273 BC	Mauryan (Bindusara)

Megasthenes (Greek)	302-298 BC	Mauryan Maurya)	(Chandragupta
Fa-Hien (Chinese)	405-411 AD	Gupta (Chandragupta II)	
Hiuen Tsang (Chinese)	630-645 AD	Pushyabhuti (Harshavardhana)	
I-Tsing (Chinese)	671-695 AD	(Visited India in connection with Buddhism)	
Al-Masudi (Arab)	956 AD	(Has given account of India in his book 'Muruj- ul-Zehab')	
Al-Biruni (Khwarazm)	1024- 1030 AD	(He came to India along with Mahmud of Ghazni)	
Marco Polo (Venetian)	1292- 1294 AD	Pandyan Kulasekhara)	(Madverman,
Ibn Battuta (Moroccan)	1333- 1347 AD	Tughlaq Tughlaq)	(Muhammad-Bin-
Shihabuddin al- Umari (Damascus)	1348 AD	At-Ta'rif bi-al-mustalah ash- sharif	
Nicolo De Conti (Venetian)	1420- 1421 AD	Vijayanagara (Devaraya I)	
Abdur Razzaq (Persian)	1443- 1444 AD	Vijayanagara (Devaraya II)	
Athanasius Nikitin (Russian)	1470- 1474 AD	Bahmani (Muhammad III)	
Domingo Paes (Portuguese)	1520- 1522 AD	Vijayanagara Raya)	(Krishnadeva
Duarte Barbosa (Portuguese)	1500- 1516 AD	Vijayanagara Raya)	(Krishnadeva

Fernao (Portuguese)	Nuniz	1535-1537 AD	Tuluva dynasty (Achyutdeva Raya)
William (British)	Hawkins	1608-1611 AD	Mughal Emperor (Jahangir)
Sir Thomas (British)	Roe	1615-1619 AD	Mughal Emperor (Jahangir)
Peter Mundy (Italian)		1630-1634 AD	Mughal Emperor (Shah Jahan)
Jean Baptiste Tavernier (French)		1638-1643 AD	Mughal Emperor (Shah Jahan)
Nicolao (Italian)	Manucci	1653-1708 AD	Timurid dynasty (Dara Shikoh)
Francois (French)	Bernier	1656-1717 AD	Timurid Dynasty (Dara Shikoh)

Foreign Travellers in Indian History

Megasthenes (302-298 B.C.)

- Greek ethnographer & ambassador.
- Ambassador of Seleucus Nicator, who visited in the court of Chandragupta Maurya.
- Described India in his book Indika.
- Megasthenes also describes about India's two major rivers Sindhu and Ganga.
- First person to describe ancient India, and for that reason he has been called "The Father of Indian history"

Deimachos (320-273 BC)

- Greek Ambassador
- Come as ambassador to Bindusāra or Amitraghāta, the son and successor of Chandragupta Maurya.
- Provided important information about the contemporary society and polity.
- He was sent by Antiochus I (the son of Seleucus Nicator).

Ptolemy (130 A.D.)

- From Greece

- Geographer
- Wrote “the geography of India”-which describes ancient Indian geography.

Faxian (AD 405-411)

- The Chinese wayfarer arrived in India on foot during the days of Chandragupta Vikramaditya.
- The first Buddhist pilgrim to visit India, Faxian has given valuable details about the Gupta dynasty, and the social and economic spheres.
- He is known for his visit to Lumbini.
- His voyage is described in his travelogue “Record of Buddhist Kingdom”
- ‘Foguoji’ is one of his famous books.

Xuanzang (Hiuen Tsang) (630 AD)

- also known as Hiuen Tsang.
- The Chinese traveller visited India in and stayed on for 15 years.
- He visited India during the supremacy of Harsha Vardhana.
- He studied about the caste system of the days and wrote the book ‘Si-Yu-Ki.’/ ‘THE RECORDS OF WESTERN WORLD’
- He visited Deccan, Orissa, and Bengal while studying at Nalanda University.

I-TSING (671-695 AD)

- He was a Chinese traveller.
- Visited India in connection with Buddhism.
- His work include biographies many important monks.

Al Masudi (AD 957)

- Arab traveller
- Has given account of India in his book ‘Muruj- ul-Zehab’
- The book discusses India’s political, economic and religious history.

Al-beruni (1024-1030 A.D.)

- Persian scholar.
- He came to India along with Mahmud of Ghazni.
- He was the first muslim scholar to study India.
- He wrote the book ‘Tahqiq-i-Hind’.
- Considered the Father of Indology.

Marco Polo (1292-94)

- Italian mercantile trader-explorer.

- He visited Southern India during the reign of Rudramma Devi of the Kakatiyas.
- Visited South India also during the reign of Pandyan ruler of Madurai, Madverman, Kulshekhara (1272-1311)
- His work “The Book of Sir Marco Polo” which gives an invaluable account of the economic history of India.

Ibn Battuta (1333 to 1342)

- Moroccan traveller.
- Visited India during the reign of Muhammad-Bin-Tughlaq.
- Appointed as judge by Tughlaq.
- His book ‘The Travels’ details about the much-mocked administrative reforms of Delhi Sultan Muhammad bin Tughluq.
- His book “Rehla” (the travelogue)

Shihabuddin al-Umari (1348 A.D.)

- Came from Damascus
- He gives a vivid account of India in his book “Masalik albsar fi-mamalik al-amsar”

Nicolo Conti (1420-1421 A.D.)

- Venetian traveler
- Came during the rule of Devraya I of Sangam Dynasty of Vijayanagar empire.
- Given a graphic account of Vijayanagara’s capital.
- A book named “Historia de Varietate Fortunae” was written by Niccolo Conti.

Abdur Razzaq (1443-1444 A.D.)

- Persian traveller, Ambassador of Shahrukh of Timurid dynasty.
- Came during the rule of Devraya II of Vijaynagar Empire.
- Stayed in India at the palace of the Zamorin of Kozhikode, Calicut
- His book entitled ‘Matla-us-Sadain wa Majma-ul-Bahrain’ described the life and events in Calicut under the Zamorin and also of the Ancient City of Vijayanagara at Hampi.

Afanasi Nikitin (1470- 1474 A.D.)

- also known as Athanasius Nikitin
- Russian merchant
- Visited South India
- Describes the condition of the Bahmani kingdom under Muhammad III (1463-82).

- His narrative “The journey beyond three seas”.
 - The diary by Afanasy Nikitin throws light upon the Islamic culture of this region and proves to be a significant source.

Duarte Barbosa (AD 1500)

- Portuguese voyager
- Stayed in India for 16 years, most of the time in Kerala and in Vijayanagara dynasty.
- Visited Vijayanagara during the time of Krishna Deva Raya.
- Barbosa studied Malayalam and has written about the caste culture that prevailed here as also about the social life.
- He wrote the ‘Book of Duarte Barbosa.’

Domingo Paes (1520-1522 A.D.)

- Portuguese traveler.
- Visited the court of Krishnadeva Raya of Tuluva dynasty of Vijayanagar empire.
- Paes’ description of his voyage to Vijayanagara during Krishnadevaraya’s reign is mostly a detailed observation, as it covers in detail Vijayanagara’s military structure called Malankara system and the yearly royal Durga festival.

Fernao Nuniz (1535-1537 A.D.)

- Portuguese merchant.
- Visited during the rule of Achyutdeva Raya of Tuluva dynasty of Vijayanagar Empire.
- Wrote history of the empire from its earliest times.
- His descriptions give a glimpse into the Mahanavami festival.
- He admires the extravagant jewels worn by the ladies of the court and the thousands of women who serve the king.
- He was interested in the history of Vijayanagara, especially the founding of the city, and his subsequent career in the three ruling dynasties, and the battles between Deccan Sultan and Olisnaraya.

John Hughen Von Linschotten (1583 A.D.)

- Dutch traveler
- Given a valuable account of the social and economic life of South India.

Ralph Fitch

- Ralph Fitch was an English (British) traveller to visit India during Mughal period.
- Ralph Fitch was the first Englishmen to visit Akbar’s court.

	<ul style="list-style-type: none">▪ He visited Akbar's court in 1585 AD.▪ He praised about Agra, Fatehpur Sikri, Ahmedabad and Delhi in his description about Indian towns of that period.▪ He visited Bihar in 1587. He traveled to India through the land route. <p>William Hawkins (AD1608 to 1611)</p> <ul style="list-style-type: none">▪ Britain's King James I had sent Hawkins as ambassador to the Mughal palace of Emperor Jahangeer.▪ Captain William Hawkins led the first expedition of the English East India Company to India in 1609.▪ He did not succeed in getting Jahangir's permission to start a factory. <p>Thomas Coryat (1612-1617 AD)</p> <ul style="list-style-type: none">▪ English traveller▪ Under Reign: Jahangir <p>Pal Canning(1615-1625)</p> <ul style="list-style-type: none">▪ English traveller▪ Visited under the reign of Jahangir
8.	<p>Paramaras, Chandelas, Kalachuris & Sisodiyas</p> <p>Paramar Dynasty</p> <p>The Parmar Dynasty was a medieval Indian ruling dynasty that held power in the Malwa region of present-day central India from the 9th to the 14th centuries. They are regarded as belonging to the Agnikula or Agnivansha.</p> <p>Paramar Dynasty</p> <p>Period: 972 - 1305 AD Capital: Dhar and Mandu</p> <ul style="list-style-type: none">▪ Founder: It was founded by Upendra (Krishanaraja) at the beginning of the 9th century.<ul style="list-style-type: none">▪ Siyaka II made it an independent kingdom. Siyaka II succeeded the Rashtrakutas of Manyketa after defeating Rashtrakuta King Khotigga.▪ The extent of rule: They ruled Malwa and surrounding areas in west-central India. They included territories from Chittor in the north to Konkan in the south and from the Sabarmati River in the west to Vidisha in the east.

	<ul style="list-style-type: none">▪ Famous rulers: Siyaka II, Prithvi Vallabha, Sindhuraja, Bhoja, Naravarman, Mahalakadeva.▪ Sources:<ul style="list-style-type: none">▪ The Harsola copper plates of Siyaka II mention a king called Akalavarsha.▪ Nava-sahasanka-charita mentions the story title 'Paramar'. <p>Prithvi Vallabha / Munja (972 - 990 AD)</p> <ul style="list-style-type: none">▪ Military conquests: He defeated the Kalachuris, the Huns, the Guhilas, the Nadulas, and the Tailapa.<ul style="list-style-type: none">▪ He was defeated and killed by western Chalukya king Tailapa II.▪ Titles: Amoghavarsha, Prithvi Vallabha, and Sri Vallabha.▪ Military conquests: He defeated Satyashraya of the Western Chalukyas.<ul style="list-style-type: none">▪ He defeated the Somavanshis of south Kosala, the Shilaharas of Konkana, and the ruler of Lata.▪ Source: His biography "Nava-Sahasanka- Charita" is written by his court poet Padma Gupta. <p>Sindhuraja (990 - 1010 AD)</p> <ul style="list-style-type: none">▪ Contribution:<ul style="list-style-type: none">▪ He made a great contribution to the field of literature.▪ Court poets and their work during his period:<ul style="list-style-type: none">▪ Dhanajaya: Author of "Dasharupaka"▪ Dhanika: Author of "Yashorupa valika"▪ Dhanapala: Author of "Tilak-manjari".
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Bhoja (1010 - 1055 CE)

- **Military conquests:** He defeated the **Chalukyas** of Lata (present-day Gujarat), Shilahara of Konkan, Chahamanas of Shakambhari,
- **Titles:** Parameshvara-Parama Bhattaraka.
- **Source:**
 - He has been described as “**Kaviraj**” in **Udaypur Prashasti**.
 - **Modasa copper plates** are the earliest historical record of Bhoja's reign.
- **Contribution:**
 - **Architecture:**
 - He founded the city of **Bhojpur**.
 - He constructed **Bhojeshwar Temple** and three dams in the area.
 - He founded the **Bhoj Shala**, a centre for Sanskrit studies in Dhar.
 - **Literature:**
 - He was a great patron of art and literature and adorned many court poets.
 - He authored the **Sarasvati-Kanthabharana**, a Sanskrit Grammar treatise. His other works include **Bhujabala-**

	<p>Bhima, Charucharya, Shalihotra, and Shringara-Prakasha.</p> <ul style="list-style-type: none">▪ Dasabala, the court poet of Bhoja composed Chintamani-Sarnika. <p>Source: Dewas grant inscription suggests that Naravarman succeeded Udayaditya on the throne.</p> <p>Naravarman (1094-1133 AD) Contribution: He had written the Nagpur Prashasti and restored the Mahakala temple in Ujjain.</p> <p>Decline:</p> <ul style="list-style-type: none">▪ Weak rulers: Rulers after Bhoja were weak and could not manage the empire.▪ Invasions: Parmara Dynasty faced invasions from neighbours such as Western Chalukyas, the Yadavas, the Delhi Sultanate, and the Vaghelas.<ul style="list-style-type: none">▪ The last Paramara king Mahalakadeva was defeated and killed by the army of Ayn al-Mulk Multani (Governor of Alauddin Khilji) in 1305 CE. <p>READ HERE</p>
9.	<p>The Gurjara-Pratiharas and Pala Dynasty</p> <p>Gurjara-Pratiharas</p> <ul style="list-style-type: none">▪ The meaning of the word Pratihara is "doorman."▪ The Gurjara-Pratiharas came to prominence in the second quarter of the 8th century, when they offered successful resistance to the Arabs during the time of Nagabhata I.▪ Bhoja was the Pratihara dynasty's greatest emperor and the actual founder of the empire.▪ The Pratiharas who ruled over Kannauj for a longtime are also called Gurjara- Pratiharas.

- In the **eastern and central portions of Rajasthan, the Pratiharas** founded a number of principalities.
- The expansion of the **Gurjara-Pratihara Kingdom** involved constant conflicts with other contemporary powers such as the **Palas** and **Rashtrakutas**.
- They fought with the **Rashtrakutas** for **Malwa** and **Gujarat**, and subsequently for **Kanauj**, which meant control of the **upper Ganga valley**.
- **Dhruva and Gopal III** of the **Rashtrakuta Kingdom** defeated the early **Pratihara emperors'** attempts to expand their dominion over the **Malwa region and the upper Ganga basin**.
- The **Rashtrakutas** defeated the **Pratiharas** in **790** and again in **806-07**, after which they withdrew to the **Deccan** and cleared the way for the **Palas**.
- The **poet Rajashekara**, associated with the court of the **Gurjara-Pratihara King Mahendrapala** and his son **Mahipala**.

Prominent Ruler of Pratiharas

- **Nagabhata I (730 – 760 AD):**
 - The foundation of **Pratihara dynasty's** magnitude was positioned by **Nagabhata I**, who ruled between **730-756 C.E.**
 - His rule was prominent because of his successful confrontation with the **Arabs**.
 - He defeated the **Arabs** while the **caliphate** was being propagated.
 - He established an empire extending from **Gujarat to Gwalior** and defied the **Arab** invasions towards further **east of Sindh**.
 - He fought against **King Dantidurga** the **Rashtrakuta** ruler as well and was defeated.
 - Conversely the success of **Dantidurga** was short-term and **Nagabhata** left for his successors a far-reaching empire which included **Gujarat, Malwa** and parts of **Rajputana**.
 - **Nagabhata I** was succeeded by his brother's sons, **Kakkuka and Devaraja**.
- **Vatsaraja (780 – 800 AD):**
 - **Devaraja** was succeeded by his son **Vatsaraja** who proved to be an influential ruler.

	<ul style="list-style-type: none"> ▪ He ruled from 775 to 805 AD. He seems to have consolidated his position and made Ujjain as his capital. ▪ He was on the verge of his imperial career in Western India. ▪ He increased his control over a sizable portion of north India. ▪ He in trying to be ruler of Northern India annexed the territories upto Kanauj and central Rajputra by defeating Bhandi, the ruling dynasty probably related to the Vardhanas. ▪ Kannauj (Western Uttar Pradesh) became his capital. ▪ His ambition to capture Kannauj led him into conflicts with the Pala ruler Dharmapala of Bengal and the Rashtrakuta ruler Dhruva. ▪ In the tripartite struggle, Dharmapala (the Pala king) was defeated by Vatsaraja, who was then defeated by Dhruv (the Rashtrakuta king). ▪ He succeeded in defeating Dharmapala in the Doab region and vanquished Northern India including the Ganga Yamuna valley. ▪ Dhurva defeated him later on and captured Kannauj. ▪ Vatsraja was succeeded by Nagabhata II. <p>READ HERE</p>			
<p>10.</p>	<p>Forests in India</p> <p>At present, in India, there is no clear nationally-accepted definition of 'forest'. States are responsible for determining their definition of forests. The prerogative of the states to define forests stems from a 1996 Supreme Court order called the T.N. Godavarman Thirumulkpad vs the Union of India judgment. In the judgement, the Supreme Court interpreted that the word "forest" must be understood according to its "dictionary meaning". This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise.</p> <p>Classification of Forests</p> <p>On Administration-Basis</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">Reserved Forests</td> <td style="width: 33%;">Protected Forests</td> <td style="width: 33%;">Unprotected Forests</td> </tr> </table>	Reserved Forests	Protected Forests	Unprotected Forests
Reserved Forests	Protected Forests	Unprotected Forests		

- Under direct supervision of the Government.
- No public entry allowed for the commercial purpose of cattle grazing.
- 53% of the **Total Forest Area (TFA)** of the country under this category.
- Looked after by the government.
- Local people are allowed to collect forest produce and cattle grazing without causing any serious damage.
- Occupy about 29% of the TFA.
- Unclassified Forests.
- No restriction on cutting trees or grazing cattle.
- Occupy 18% of the TFA.

Classification as per Constitution of India

State Forests

- Include almost all important forest areas of the country and are under full control of the government (state/central).
- Cover almost 94% of the TFA.

Commercial Forests

- Owned and administered by local bodies (municipal corporations, village panchayats, district boards etc.)
- Cover 5% of the TFA.

Private Forests

- Under private ownership.
- Cover slightly

more than
1% of the
TFA.

On Merchantability

Merchantable

- Forests that are accessible.
- Cover 82% of the TFA.

Non- Merchantable

- Forests that are situated at high mountainous peaks; non accessible.
- Cover 18% of the TFA.

Based on Composition

Coniferous Forests

- Temperate Forests
- Found in middle and upper elevations of the eastern Middle Himalayas and N-E Indian states like Arunachal Pradesh.
- Cover 6.50% of the TFA of the country.

Broad-Leaf Forests

- Tropical and subtropical monsoon forests.
- Found in the plateaus, plains and mountainous areas of the country.
- Cover about 94% of the TFA of the country.

Based on Average Annual Rainfall

In India, the Forests, on the basis of average annual rainfall, can be categorised broadly into five categories:

Tropical Evergreen Forests

- **Moist Evergreen Forests:**
 - **Region:** Found in southern India along the **Western Ghats, Andaman and Nicobar Islands** and **north-eastern region.**

	<ul style="list-style-type: none">▪ Climatic Conditions: Found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C.▪ Trees: In these forests, trees reach great heights up to 60 m or above.<ul style="list-style-type: none">▪ There is no definite time for trees to shed their leaves, flowering and fruition; these forests appear green all the year round.▪ Species found in these forests include Rosewood, Mahogany, Aini, Ebony, etc.▪ The more common trees that are found here are the jackfruit, betel nut palm, jamun, mango, and hollock.▪ Semi Evergreen Forests:<ul style="list-style-type: none">▪ Region: Found in the less rainy parts of the regions where moist evergreen forests are found; Western Ghats, Andaman and Nicobar Islands, and the Eastern Himalayas.▪ Trees: Such forests have a mixture of moist evergreen and moist deciduous trees.<ul style="list-style-type: none">▪ The under growing climbers provide an evergreen character to these forests.▪ Main species are white cedar, hollock and kail.▪ Dry evergreen:<ul style="list-style-type: none">▪ Region: Found in the Shivalik Hills and foothills of the Himalayas up to a height of 1000 metres in the north.<ul style="list-style-type: none">▪ Found along Andhra Pradesh and Karnataka coast in the south.▪ Climatic Conditions: Usually have a prolonged hot and dry season and a cold winter.▪ Trees: Have mainly hard-leaved evergreen trees with fragrant flowers, along with a few deciduous trees.<ul style="list-style-type: none">▪ Trees have a varnished look.▪ Some of the more common ones are the pomegranate, olive, and oleander.
11.	<p>Temples of Badami Chalukyas</p> <p>The Badami Chalukya era (7th and 8th century) was an important period in the development of South Indian architecture. Their style of architecture is</p>

called “Chalukyan architecture” or “Karnata Dravida architecture”. Nearly a hundred monuments built by them, rock cut (cave) as well as structural, and are found in the Malaprabha river basin in modern Bagalkot district of northern Karnataka. The building material they used was reddish-golden Sandstone found locally. Though they ruled a vast empire, the Chalukyan workshops concentrated most of their temple building activity in a relatively small area within the Chalukyan heartland – Aihole, Badami, Pattadakal and Mahakuta in modern Karnataka state.

Salient Features

These temples are a **mixture of Northern and Dravida style of temple** architecture and represent a transition as well as experimentation in the temple architecture. The temples are located on the banks of River Tungabhadra and Malprabaha in Karnataka and Alampur in Andhra Pradesh, which is near Kurnool. The largest temple of Chalukyas of Badami is **Virupaksha Temple**, whose complex encloses 30 sub shrines and a large Nandi mandapa. This was also earliest example of Shiva temples, which have a Nandi pavilion in front of the temple.

Examples

Ravana Phadi Cave

The earliest monument of Chalukyas of Badami is the **Ravana Phadi Cave** at Aihole, not far from Badami. It was probably made around A.D. 550 and is dedicated to Siva. Ravana Phadi Cave is one of the Earliest Rock Cut Temple located at Aihole, the first capital of the early Chalukyas. At Aihole, they built more than 70 Hindu Temples later.

Badami Cave Temples

Badami cave temples are located at Badami. The red sandstone cliffs of Badami offered a spectacular setting for the excavation of four caves, **three Brahmanical and one Jaina (Parshwavanath)**. The largest and most impressive of these is Cave 3, dedicated to Vishnu. An inscription next to a Varaha depiction states that Mangalesa, a brother of King Kirtivarman, dedicated the cave in A.D. 578. Members of the royal family of Chalukyas patronized many Chalukyan monuments. All of them were created in sixth and 7th century. **The architecture is a mixture of the Nagara style and Dravida style.** Apart from the above four, there is a fifth natural Buddhist cave in Badami.

	<p><u>Virupaksha Temple, Hampi</u></p> <p>Virupaksha Temple is located in Hampi in Karnataka on the banks of the Tungabhadra river. Virupaksha Temple is dedicated to Lord Shiva and was created by the Chalukyas of Badami initially in 8th century. The temple was improvised in Vijaynagar Empire. It is in the Virupaksha temple at Hampi that full glory of the Early Chalukyan art can be seen. This temple was built in 735 AD by a queen of Vikramaditya II to celebrate the victory over the Pallavas of Kanchipuram.</p> <p><u>Ladkhan Temple, Aihole</u></p> <p>The Ladkhan temple is the earliest temple of Aihole, which dates back to 5th century AD. An inscription on this temple says that it was dedicated to Durga. There is a Shiva ling out there. The temple is known as Lad Khan after its owner (in most recent times) at a place used as cattle sheds or houses. This temple has a large porch and is made in a Panchayat hall kind of design with 12 pillars. This was earliest experiment for a pillar based structures in the temple architecture.</p> <p><u>Navbhramha Group of Temples, Alampur</u></p> <p>The Navabrahma Group of temples is located at Alampur in Andhra Pradesh. There are total 9 temples and present a marvelous piece of <u>art of the Chalukyas of Badami outside Karnataka</u>. These temple are based upon the Nagara style and do not reflect the Dravidian style of temple architecture (8 out of 9 are clearly Nagara style). The Alampur temples are the finest example of the Chalukyas of Badami Art. The Nava Bhramma temples are Taraka Bhramma, Swarga Bhramma, Padma Bhramma, Bala Bhramma, Garuda Bhramma, Kumara Bhramma, Arka Bhramma, Vira Bhramma and the Vishwa Bhramma. These temples are all enclosed in a courtyard on the left bank of the river Tungabhadra.</p> <p><u>Temples at Pattadakal</u></p> <p>Numerous temples at Pattadakal on the bank of river Malprabha, some kilometers from Aihole mark the return of the Chalukya patronage to Karnataka after several years of activity in the Andhra Pradesh. The first temple is Galagnatha Temple which is in Nagara style similar to the Alampur temple.</p>
12.	<p>Bharhut Sculptures</p> <ul style="list-style-type: none">▪ The Bharhut stupa may have been first built by the Maurya king Ashoka in the 3rd century BCE, but many works of art, particularly

the gateway and railings, were apparently added during the Shunga period, with many reliefs from the 2nd century BCE, or later. Alternatively, the sculptures made have been added during the reign of the Sughanas.

- Bharhut is a village located in the Satna district of Madhya Pradesh, central India.
- Bharhut Sculptures are tall, like the Mauryan depictions of Yaksha and Yakshini, and the sculptural volume is modelled in low relief to ensure linearity.
- The illusion of three-dimensionality is conveyed with slanted perspective in the relief panels displaying storytelling. The narrative's clarity is improved by focusing on key occurrences.
- At Bharhut, narrative panels are exhibited with fewer characters, but as time passes, other characters begin to appear in the picture area, in addition to the main character in the story.
- Occasionally, more than one event in a single geographic location is shown in the pictorial space, or only one major event is depicted in the pictorial area.
- At Bharhut, narrative reliefs demonstrate how artisans employed pictorial language to effectively transmit stories.

Significance of Bharhut Sculptures

- Unlike the Mauryas' imperial art, the reliefs and figures in Bharhut stupa were provided by lay people, monks, and nuns, according to inscriptions on the railings. As a result, it is considered one of the earliest instances of Maurya popular art.
- The Buddha's previous incarnations' birth stories, known as Jataka tales, are depicted on the railings.
- The aniconic phase of Buddhist art is represented by the Bharhut stupa. Buddha has been shown as a series of symbols.
- Except for one foreigner, presumed to be an Indo-Greek soldier, who is represented wearing the Indian dhoti with Buddhist iconography, the style is mainly flat, with low bass relief, and all figures are depicted wearing the Indian dhoti.
- The Bharhut stupa railings feature several depictions of yakshas and yakshis, who have long been a part of Indian society.
- The earliest depictions of the Yakshas and Yakshis, which later became part of later art, may be seen at Bharhut. These represent the

	<p>spirit of nature and help to remind us of the divinity that lurks beneath all we see.</p> <ul style="list-style-type: none">▪ The Yakshas and Yakshis represent nature's protection and plenty, which ensures the continuation of life.▪ Kubera, whom the Yaksha and Yakshis attend, is depicted on the north gateway of the Vedika at Bharhut.▪ The photos of Yakshi Chandra and Krishika, who are seen entangled with a tree, can be found. Another Yakshi, Ashok Dohada, holds an Ashoka Tree leaf in her palm as well as a kid in her womb (two hearts) and weaves her way through the tree like a creeper, symbolizing fertility.▪ One of the sculptures depicts Lakshmi on the Bharhut's railing, which is the earliest representation of the goddess.▪ The sculptures on the Bharhut railings are in low relief and do not have the depth of later Indic art.▪ A Greek warrior is depicted on a pillar of the vedika. He has short hair and a headband and is dressed in boots and a tunic.▪ A Nagaraja, the serpent king, is shown on another fence, dressed in human form but wearing a serpent hood. Naga deities, like yakshas and yakshis, serve to remind us of the power, protection, and fertility of nature.▪ The railing of the Bharhut "stupa" depicts Queen Maya's dream, which occurred before the Buddha's birth.▪ The figure of the Buddha was never depicted in early Buddhist art. Instead, symbols of him were there, including a seat, footprints, the Bodhi tree, the wheel, and the "stupa." The railings' sculptural reliefs are a veritable collection of early Buddhist iconographic elements.
13.	<p>ABC of Bhakti Movement</p> <p>The term "Bhakti" symbolises devotion or a passionate love for the divine. The Bhakti movement stresses the mystical union of the individual with God. Although the seeds of Bhakti can be found in the Vedas, it was not emphasised during the early period. The process of adoration of a personal God developed during the course of the 6th century BCE, with the rise of the heterodox movements of Buddhism and Jainism. For instance, under Mahayana Buddhism, the Buddha began to be worshipped in his gracious</p>

(avalokita) form. The worship of Vishnu too started around the same time, which was popularised to a great extent by the Gupta kings.

Vaishnava and Shaiva devotionalism were given new emphasis and expression by the Alvars and Nayanars saints of South India in the early medieval period. As per the tradition, there were 12 Alvars and 63 Nayanars. Using devotion to achieve salvation was a key component of the Bhakti movement which was started as a religious reformation in medieval India. The period of the 8th to 18th century is dedicated to the Bhakti movement where a number of saints (Hindu, Muslim, Sikh) evolved as the messiah of Bhakti (devotion), teaching people the transition of life from normalcy to enlightenment through salvation.

The Bhakti movement in South India

The development of the popular Bhakti movement took place in south India between the 7th and 12th centuries CE. It was based on religious equality and broad-based social participation. The Shivaite Nayannars and the Vaishnavaite Alvars, who preached the Bhakti cult under the Pallavas, Pandyas and Cholas disregarded the austerities preached by the Jains and the Buddhists. They preached personal devotion to God as a means of salvation. They disregarded the rigidities of the caste system and carried the message of love and personal devotion to God to various parts of South India with the help of local languages.

The Bhakti movement in North India

The Bhakti movement gained importance in the northern parts of the country during the 12th-17th century CE. The Bhakti movement in north India is sometimes seen as a continuation of the movement that originated in the south. Despite the similarities in the tradition of the two regions, the idea of Bhakti varied in terms of the teachings of each of the saints. The northern medieval Bhakti movement was influenced by the spread of Islam in India. The main features of Islam like belief in one God (monotheism), equality and brotherhood, and rejection of rituals and class divisions greatly influenced the Bhakti movement of this era. The movement also brought certain reforms to society.

Origin of Bhakti Movement

Some scholars believe that the rise of the Bhakti movement was a reaction against feudal oppression and against Rajput-Brahmin domination.

- Another group of scholars believe that the socio-economic changes in the early medieval period led to the emergence of this movement.

	<p>During the 13th and 14th centuries, the demand for goods increased which led to the migration of artisans into cities. The Bhakti movement gained support from these classes of society as they were not satisfied with the low status given to them by the Brahmanical system and hence, they turned towards Bhakti since it focussed on equality.</p> <p>Though there is no single opinion about the origin of the Bhakti movement, there is unanimity of thought over the fact that the Bhakti movement was based on equality and devotional surrender to a personally conceived supreme God.</p> <p>Saguna and Nirguna are the two different ideological streams of the Bhakti movement.</p> <p>READ HERE</p>
14.	<p>ABC of Jainism</p> <p>Jainism is an ancient religion that is rooted in the philosophy that teaches the way to liberation and a path to spiritual purity and enlightenment through disciplined nonviolence to all living creatures.</p> <p>When did Jainism Originate?</p> <ul style="list-style-type: none">▪ Jainism came to prominence in the 6th century B.C., when Lord Mahavira propagated the religion.▪ There were 24 great teachers, the last of whom was Lord Mahavira.<ul style="list-style-type: none">▪ These twenty-four teachers were called Tirthankaras-people who had attained all knowledge (Moksha) while living and preached it to the people.▪ The first Tirthankara was Rishabhatha.▪ The word 'Jain' is derived from jina or jaina which means the 'Conqueror'. <p>Vardhamana Mahavira</p> <ul style="list-style-type: none">▪ Vardhamana Mahavira, the 24th Tirthankara, was born in 540 B.C. in a village called Kundagrama near Vaishali.▪ He belonged to Jnatrika clan and was connected to the royal family of Magadha.▪ His father Siddharta was the head of the Jnathrika Kshatriya clan and his mother Trishala was a sister of Chetaka, the king of Vaishali.▪ At the age of 30 years, he renounced his home and become an ascetic.

- He practised austerity for **12 years** and attained highest spiritual knowledge called **Kaivalya**(i.e conquered misery and happiness) at the age of 42 years.
- He delivered his first sermon at **Pava**.
- A symbol was associated with every Tirthankara and Mahavira's symbol was a **lion**.
- His missions took him **Koshala, Magadha, Mithila, Champa** etc
- He passed away at the age of 72 in 468 B.C. at the **Pavapuri** in Bihar.

Origin

- Hinduism had become rigid and orthodox with complex rituals and dominance of Brahmins.
- The Varna system divided the society into 4 classes based on birth, where the two higher classes enjoyed several privileges.
- Kshatriya"s reaction against the domination of the brahmanas.
- Spread of the new agricultural economy in the north-eastern India due to the use of iron tools.

Tenets of Jainism

- It mainly aims at the **attainment of liberation**, for which no ritual is required. It can be attained through three principles called **Three Jewels or Triratna i.e.**
 - **Right Faith** (Samyaktarshana)
 - **Right Knowledge** (Samyaktjnana)
 - **Right Action** (Samyakcharita)
- **Five Doctrines of Jainism**
 - **Ahimsa**: Non-injury to living being
 - **Satya**: Do not speak a lie
 - **Asteya**: Do not steal
 - **Aparigraha**: Do not acquire property
 - **Brahmacharya**: Observe continence

Concept of God in Jainism

- Jainism believes that the universe and all its substances or entities are eternal. It has no beginning or end with respect to time. Universe runs on its own accord by its own cosmic laws.
- All the substances change or modify their forms continuously. Nothing can be destroyed or created in the universe.
 - There is no need for someone to create or manage the affairs of the universe.

- Hence Jainism does not believe in God as a creator, survivor, and destroyer of the universe.
- However Jainism does believe in God, not as a creator, but as a perfect being.
 - When a person destroys all his karmas, he becomes a liberated soul. He lives in a perfect blissful state in Moksha forever.
 - The liberated soul possesses infinite knowledge, infinite vision, infinite power, and infinite bliss. This living being is a God of Jain religion.
 - Every living being has a potential to become God.
- Hence Jains do not have one God, but Jain Gods are innumerable and their number is continuously increasing as more living beings attain liberation.

Anekantavada

- **Anekantavada in Jainism** is the ontological assumption that any entity is at once enduring but also undergoing change that is both constant and inevitable.
- The doctrine of anekantavada states that all entities have three aspects: substance (dravya), quality (guna), and mode (paryaya).
 - Dravya serves as a substratum for multiple gunas, each of which is itself constantly undergoing transformation or modification.
 - Thus, any entity has both an abiding continuous nature and qualities that are in a state of constant flux.

Syadvada

- **Syadvada**, in Jaina metaphysics, the doctrine that all judgments are conditional, holding good only in certain conditions, circumstances, or senses, expressed by the word syat (“may be”).
- The ways of looking at a thing (called naya) are infinite in number.
- Syadvada literally means the ‘method of examining different probabilities’.

Difference between Anekantavada and Syadvada

- The basic difference between them is that Anekantavada is the knowledge of all differing but opposite attributes whereas Syadvada is a process of the relative description of a particular attribute of an object or an event.

Sects/ School of Jainism

	<ul style="list-style-type: none">▪ Jain order has been divided into two major sects: Digambara and Svetambara.<ul style="list-style-type: none">▪ The division occurred mainly due to famine in Magadha which compelled a group led by Bhadrabahu to move South India .▪ During the 12 years famine, the group in South India stick to the strict practices while the group in Magadha adopted a more lax attitude and started wearing white clothes.▪ After the end of famine, when the Southern group came back to Magadha, the changed practices led to the division of Jainism into two sects.▪ Digambara:<ul style="list-style-type: none">▪ Monks of this sect believe in complete nudity. Male monks do not wear clothes while female monks wear unstitched plain white sarees.▪ Follow all five vows (Satya, Ahimsa, Asteya, Aparigraha and Brahmacharya).▪ Believe women cannot achieve liberation.▪ Bhadrabahu was an exponent of this sect.▪ Major Sub-Sects<ul style="list-style-type: none">▪ Mula Sangh▪ Bisapantha▪ Terapantha▪ Taranpantha or Samaiyapantha▪ Minor Sub-Sets<ul style="list-style-type: none">▪ Gumanapantha▪ Totapantha▪ Svetambara:<ul style="list-style-type: none">▪ Monks wear white clothes.▪ Follow only 4 vows (except brahmacharya).▪ Believe women can achieve liberation.▪ Sthulabhadra was an exponent of this sect.▪ Major Sub-Sects<ul style="list-style-type: none">▪ Murtipujaka▪ Sthanakvasi▪ Terapanthi
15.	Hampi at a Glance

Hampi is a religious city located in Karnataka, South India, which was also the capital of the ancient Vijayanagara Empire. A temple named Hampi is also established in it. This temple is situated on the southern bank of the Tungabhadra river. The city was one of the largest princely and largest cities of its time. The rulers of 'Vijayanagara' founded the city during the 13th century.

- Location: Traditionally known as Pampakshetra of Kishkindha, Hampi is located in central Karnataka on the banks of the Tungabhadra River.
- It is a UNESCO World Heritage Site.
- It is renowned for its historical and archaeological significance, as it was once the capital of the Vijayanagara Empire, one of the greatest Hindu empires in South India, which thrived from the 14th to the 16th century.
- River: The Tungabhadra River flows through Hampi.

Architecture

- The site boasts numerous grand temples, palaces, marketplaces, and other structures.
- Some of the prominent landmarks include the Virupaksha Temple, Vittala Temple, Lotus Mahal, Queen's Bath, and Elephant Stables.
- Temples of this city are noted for their large dimensions, florid ornamentation, bold and delicate carvings, stately pillars, magnificent pavilions and a great wealth of iconographic and traditional depictions which include subjects from the Ramayana and the Mahabharata.

Monuments And Temples

Virupaksha Temple

- The Virupaksha Temple, also known as the Pampavathi Temple, is located in Hampi.
- It is one of the oldest structures in Hampi, predating the establishment of the Vijayanagara Empire.
- During the Vijayanagara Empire, the temple underwent significant expansion and became a grand and impressive structure.
- The temple is dedicated to Lord Virupaksha, the patron god of the Vijayanagara rulers.
- It features three entrance towers or gopuras, with the main entrance tower being the tallest at 49 meters.
- There is a smaller second entrance tower that leads to the temple's courtyard.

- The temple complex includes subsidiary temples and extends to the Tungabhadra River, accessed through the Kanakagiri gopura.
- The Virupaksha Temple is a significant religious and architectural landmark in Hampi.

Linga Badawi

- Linga Badavi is the tallest monolithic Linga in Hampi, standing at a height of 3 feet.
- It is dedicated to Lord Shiva and is located adjacent to the Lakshmi Narasimha statue.
- Carvings of Lord Shiva's three eyes adorn the Linga housed within the chamber.
- Local folklore associates the commissioning of the Linga with a peasant woman, giving rise to its association with the term "Badya," meaning impoverished in the local language.
- The Linga's sanctuary is connected to a water passage, ensuring that it is always submerged in water.
- Linga Badavi holds great religious significance and is a notable attraction in Hampi.

Vittala Temple Complex

- The Vittala Temple complex is a prominent feature of the Hampi site.
- It houses various halls, pavilions, and multiple temples, including the famous stone chariot.
- The stone chariot has become an iconic symbol of Hampi and is utilized by Karnataka Tourism.
- The Vittala Temple, constructed in the 15th century AD, is the main temple within the complex.
- It is dedicated to Lord Vittala, an incarnation of Lord Vishnu.
- The temple has earned renown for its exceptional architecture, especially the intricately carved pillared halls.
- From the Vittala Temple complex, one can observe the remains of the Vittalapuram Township that once surrounded it.
- The Vittala Temple complex holds high regard for its historical significance and architectural grandeur.

Ganigatti Temple

- The Ganigatti Jain temple is situated in Ganagatti, India and is one of the Jain temples in Hampi.

- Alongside the Ganigatti temple, the Parsvanath Charan and Ratnantraykut Jain temples are among the several Jain temples in Hampi.
- Many of the Jain temples in Hampi are in ruins and lack idols.
- The temples were constructed in the 14th century, based on the evidence provided by the ruins.
- The Ganigatti Jain Temple, which is one of the earliest temples of the Vijayanagara Empire, features a design of a stepped pyramid with six gradually decreasing levels.
- Another notable Jain temple is the Kunthunath Jain Temple, known as the “Oil-Woman Temple.”
- The Kunthunath Jain Temple showcases a variety of Jain sculptures and follows the Vijayanagara style of architecture.
- It consists of an inner sanctuary or garbha griha, as well as two halls, the antarala Ardha mantapa and the maha mantapa.
- The Ganigatti and Kunthunath Jain temples hold historical and architectural significance within Hampi.

Krishna Temple

- The Krishna Temple was constructed in 1513 CE during the reign of King Krishnadevaraya, in commemoration of his victory over the Orissan Gajapatis.
- After the decline of the Vijayanagara Empire, the temple became abandoned.
- Despite being in ruins, the Krishna Temple continues to be a popular tourist destination due to its remarkable technological features.
- The temple showcases a swing pavilion and renowned melodic pillars, which produce musical notes when tapped.
- Additionally, it includes a Sacred Tank or Pushkarani, a water reservoir of religious significance.
- Within the temple courtyard, a large slab carries an inscription providing insights into the temple's history.
- The temple authorities have relocated the primary deity, which is a representation of Lord Krishna as a child known as Balakrishna.
- The Krishna Temple captivates visitors with its architectural marvels and serves as a testament to the grandeur of the Vijayanagara Empire.

Lotus Mahal

- The Lotus Mahal, situated in the Zanana Enclosure, is known by different names like the Lotus Palace, Chitrangini Mahal, and Kamal Mahal.
- It is a two-story symmetric structure that resembles a lotus flower.
- The Zanana Enclosure includes private temples and servant rooms dedicated to the Queen and other royal ladies.
- Considered one of the finest examples of Indo-Islamic architecture, the Lotus Mahal showcases its beauty and intricacy.
- The palace showcases a unique blend of Indian and Islamic architectural styles.
- It features intricate carvings, arches, and domes, reflecting the elegance and grandeur of the Vijayanagara Empire.
- The Lotus Mahal is an architectural marvel and stands as a testament to the artistic and cultural legacy of the era.

Pushkarani

- Pushkaranis are an important part of Hampi. They are sacred tanks that display the ancient town planning and style of the Vijayanagara era. Many of these Pushkaranis were also used as the event venue for annual boating festivals. They are beautifully designed and surrounded by pillars and arcades. During annual events, idols of Dev and Devis were taken for a coracle (a small boat) ride which connotes the holy significance of these tanks.

Palace Of Vira Harihara

- Among the most spectacular places in the Vijayanagara Empire is the Palace of Vira Harihara, once a colossal structure, which is a great attraction for visitors. However, only its foundational base now remains within the fortified area. This place testifies to the grandeur of the kings of the empire. It displays their admirable lifestyle too. The palace has suffered the ravages of time and history. The few remains have elaborate carvings that tell the tale of the gigantic and beautiful structure that once existed in its place.
- The actual boundary of the Palace can still be discerned along with the remainders of other structures entailing a lofty building with a getaway of steps, apparently wielded as a stage to mount on the royal elephants. The ruins of the royal hall also exist till date.

Hazara Rama Temple

- Built in the early 15th century by Devaraya II. Rama Hazara temple was initially a simple structure. It comprised only a sanctum, a pillared hall and an ardha (half) Mandapa. Later it was remodelled to augment the site through an open veranda and elegant pillars.
- The Hazara Rama Temple is literally translated as a thousand Rama temple, which suggests the abundance of heirlooms portraying the dominant deity of the temple. Its walls have the Ramayana carved on stones and the outer walls have relics of Rama and Krishna. These relics portray parades of royal horses, elephants, servants, combatants and dancing women carrying the celebration of the Dasara festival. These relics are the most extensive ones to be found anywhere in India.

Achyutaraya Temple

- The Achyuta Raya temple, initially known as Tiruvengalanatha Temple was built during the reign of Achyuta Deva Raya, who was one of the monarchs of the Vijayanagara Empire. This temple is dedicated to Lord Tiruvengalanatha who is an incarnation of Lord Vishnu. Later it got famous with the name of the king and came to be known as Achyutaraya temple.
- The prominent shrine of the temple is placed in the centre of a pair of rectangular concentric compartments. There are pillared porches on the inside of the two courtyard walls. Most of its parts are on the verge of collapse and decay. It is located at the end of courtesan street and can be seen from the top of Matanga Hill. At the entrance, there is a chamber that faces the verandah which leads to the main hall. There is a small shrine chamber that once glorified an image of Garuda.
- It has an accessible hall that has massively carved pillars. The sculptures are done on monolithic blocks of rocks. The idols and figures on the planks demonstrate sagas of Lord Vishnu blessing an elephant, Lord Krishna playing his flute while his calves listen, and Infant Krishna dancing while holding a snake by the tail. There is also a Mandapa that is a wedding hall of the Gods and the Goddesses for the perennial betrothal.

Hampi Bazaar

- The Virupaksha Bazaar, also known as the Bazaar of Hampi, is located at the foothills of Matanga Hill, next to the Virupaksha Temple.
- This market stretches for approximately one kilometer and is a bustling hub of activity.

	<ul style="list-style-type: none">▪ Noble houses and a series of historical pavilions lined the area, serving as market stalls and shops.▪ The Bazaar of Hampi has been an integral part of the town's commercial and cultural life.▪ During the annual Hampi festival, this area transforms into the primary stage for various performances and festivities.▪ The Bazaar of Hampi showcases the vibrant atmosphere of a traditional market and provides visitors with a glimpse into the past glory of the Vijayanagara Empire. <p>Archaeological Museum</p> <ul style="list-style-type: none">▪ The Archaeological Museum in Kamalapura, founded by the Archaeological Survey of India (ASI), is a major attraction in Hampi.▪ The museum began collecting antiques in 1972 and has since become a repository for various historical artifacts.▪ The museum comprises four galleries that house a diverse range of exhibits.▪ The galleries showcase sculptures, armoury, religious objects, gold and copper coins, sati stones, brass plates, and other artifacts from the Vijayanagara Empire.▪ Visitors can explore the rich history and cultural heritage of the region through the extensive collection displayed in the museum.▪ The Archaeological Museum offers a fascinating glimpse into the art, architecture, and daily life of the Vijayanagara Empire. <p>Hampi, a UNESCO World Heritage Site in Karnataka, was the capital of the Vijayanagar kingdom, known for its majestic temples and unique architecture.</p>
16.	<p>What is Mansabdari System?</p> <p>The Mansabdari system was a military and civil administrative system. It was introduced by the Mughal emperor Akbar in 1571. The word "mansab" is of Arabic origin, meaning "rank" or "position". Under this system, officials were assigned ranks (mansabs). It was based on their military skills and administrative capabilities. This determined their pay and the number of troops they were expected to maintain.</p>

Mansab is an Arabic word meaning "rank" or "position". In the Mughal Empire, it was a system of ranking officials based on their military skills and administrative capabilities.

Features of Mansabdari System

The Mansabdari system was introduced by the Mughals to create a centralised administrative system and a large force. They used Mansabdars and their large armies to expand the empire and effectively administer it. The main features of the mansab system were as follows:

- Mansabdars had two ranks: zat and sawar. The former indicated the officer's position in the administrative hierarchy, while the latter determined personal pay.
- Mansabdars were classified into three classes based on the ratio of their zat and sawar ranks.
- A mansabdar may be required to perform any civil or military service.
- The mansabdars were divided into 33 categories. The lowest mansabdar commanded ten soldiers, while the highest commanded 10,000.
- Only the royal family's princes and the most powerful Rajput rulers received a mansab of 10,000.
- A mansabdar's salary was sometimes paid in cash as well. Mansabdar's other source of income was the grant of jagirs.
- The soldiers' salaries were added to the mansabdar's salary. A jagir was sometimes given to him for paying soldiers' salaries.
- However, officers realised the revenue and made the necessary adjustments.
- The mansabdari system did not pass down through families.
- Horses were divided into six categories, while elephants were divided into five.
- Dakhili were troops raised by the emperor but not paid directly by the state and commanded by mansabadars.

The terms Zat and Sawar were associated with the Mansabdari administrative system during the Mughal administration.

- **Zat:** It was the noble's personal rank, which indicated his pay and status.
- **Sawar:** A rank determined how many horses a noble was required to maintain or was expected to maintain.

Structure of the Mansabdari System

- The rank or mansab of a Mansabdar consisted of two elements: personal rank (zat) and cavalry rank (sawar).
- Every Mansabdar had both zat and sawar ranks, receiving two rupees for each horse.
- For a rank of five hundred sawars, an additional allowance of a thousand rupees was given.
- Abul Fazl categorized Mansabdars into three types: equal zat and sawar ranks, half sawar rank compared to zat rank, and sawar rank less than half of zat rank.
- In exceptional circumstances like war, the number of sawars could surpass zat ranks, known as Mashrut mansab, which ended once the requirement was fulfilled.
- Mansabdars were responsible for both civil and military duties.
- Akbar established Dabhisti, where each Mansabdar was assigned twenty horses for every ten sawars to maintain a strong cavalry force, essential for Mughal military operations.

Who were Mansabdars?

Mansabdar is a Persian word meaning "holder of a mansab". In the Mughal Empire, a Mansabdar was an official who held a rank in the Mansabdari system. Mansabdars were responsible for both military and civil administration. They were granted jagirs (land grants) in lieu of their salaries.

Recruitment of Mansabdars

- The Mughals recruited Mansabdars based on recommendations from Mirbakshi, nobles, and provincial governors.
- The emperor had the sole authority to appoint and dismiss Mansabdars. Mansabdars could be promoted or demoted based on their performance.
- Mansabdars could be recruited from any social background. They were typically drawn from the nobility, the military, and the merchant class.
- The emperor would consider a variety of factors when appointing a Mansabdar, including:
 - the individual's military skills,
 - administrative experience, and
 - loyalty to the empire.

Ranking of Mansabdars

The Mansabdars in the Mughal Empire held ranks that determined their status and responsibilities within the administration. The ranking system of

Mansabdars was structured and organized. The ranks of Mansabdars were denoted by a numerical value known as "Zat," which indicated the number of cavalymen a Mansabdar was required to maintain. The higher the Zat, the higher the rank and the greater the number of cavalymen under their command. Mansabdars were classified into various grades, representing different levels of authority and influence. The highest-ranking Mansabdars held prestigious positions and enjoyed privileges in the Mughal court.

Roles and Responsibilities of Mansabdars

- The mansabdars were assigned to the military as well as administrative responsibilities.
- Mansabdars were required to keep a certain number of sawars or cavalymen on hand.
- They needed to bring their cavalymen in for inspection and registration.
- In addition to holding positions like wazir, Bakshi, faujdar, and subedar, the Mansabdars were appointed to all civil and military posts aside from the judiciary.
- The Mansabdari system became the foundation of military and civil administration during Akbar's reign.

Compensation of Mansabdars

- Cash (naqd) or land assignments were the two ways that mansabdars were compensated (jagir).
- The revenues from their jagir were given to them and deducted from their salaries.
- As salaries, they were given a portion of the proceeds from their jagir.
- The mansabdar paid the salaries of the cavalymen he employed.
- Those paid in cash were known as naqdi, while those paid through jagir assignments were known as jagirdars.
- It is worth noting that the majority of Mansabdars were immigrants of Central Asian, Turk, Persian, and Afghan origin, though a small number of Indians were also appointed.

Mansabdari System under Akbar

- The Mansabdari system was a unified state service of officers arranged in a military (cavalry) rank hierarchy but performing both civil (primarily financial) and military functions under Akbar's reign.
- Akabr established an organisation where all superior officials would have their status defined in military terms.

	<ul style="list-style-type: none">▪ The jagirs were naturally transferable (but not hereditary), and no mansabdar was permitted to keep the same jagir for an extended period of time.▪ The only deviation from the standard jagir transfer system was the watan-jagirs.▪ Watan-jagirs were generally considered acceptable to zamindars who had already possessed their watans (homelands) before the Mughal Empire's expansion.▪ Watan jagirs were given to some Rajput mansabdars.▪ The mansabdari system went through several stages of transformation, which can be broadly classified into five:<ul style="list-style-type: none">▪ The numerical rank appeared as a Mughal military fact.▪ The effective strength of mansabdar fell below the nominal strength.▪ For the first time in Indian history, double rank was introduced.▪ The soldier's or trooper's rank was merely a military fact.▪ The institution was reorganised by Akbar's successors in the final phase. <p>The successors of Akbar delivered a significant blow to the mansabdari system in multiple ways.</p>
17.	<p>ABC of Judicial Activism</p> <p>Judicial activism can be seen as a way for judges to bring about change and promote justice. Judges play a crucial role in our legal system. They interpret laws and make decisions in court cases. But sometimes, they go beyond just applying the existing laws. They may take a more active role and make decisions that have a bigger impact on society. This is known as judicial activism. They might interpret the law in a broad and flexible way to address new and evolving challenges. For example, they could protect the rights of marginalized groups.</p> <p>Judicial activism often involves challenging laws made by the government.</p> <ul style="list-style-type: none">▪ Judges are people who decide legal cases and make sure laws are followed.▪ Judicial activism happens when judges make decisions that change or create new laws. It is not just about applying existing ones.▪ Instead of sticking strictly to what the law says, judges use their own beliefs and values to shape their decisions.

- This can mean expanding or reinterpreting the meaning of words in the law to fit their own ideas.
- Judicial activism can have both positive and negative effects.
 - Supporters say it allows judges to protect individual rights and make the law fairer.
 - Critics say it goes against the proper role of judges. It can undermine the power of elected officials to make laws.
- Sometimes, judicial activism is controversial and leads to debates and disagreements.

Judicial Activism Methods

Judicial activism refers to judges interpreting and using the law in a way that goes beyond what is written and what has been done before. They actively shape public policy with their decisions.

Here are some common ways judges engage in judicial activism:

Broad Interpretation of the Constitution

Some judges interpret the constitution broadly, considering how society and culture have changed. They focus on the principles and values of the constitution, not just what the framers originally meant.

Creative Statutory Interpretation

Judges may interpret laws creatively to address current social issues. They may stretch the law's wording. They might also use techniques like purposive interpretation to achieve desired outcomes.

Expansion of Constitutional Rights

Activist judges may expand constitutional rights beyond what they were initially known to be. They might identify new rights or make existing ones broader. By this, they safeguard marginalized groups or tackle fresh social issues.

Judicial review and striking down laws

Activist judges review laws made by the government to see if they follow the Constitution. They try to get rid of laws that they think violate constitutional rights or principles.

Policy-Based Reasoning

Judicial activism often refers to the following:

- judges making decisions to support specific policy goals or
- judges making decisions to fix perceived social injustices.

They think about the wider impact and results of their decisions. It is not just about the specific case they are working on.

Public Interest Litigation

Judges encourage public interest litigation. Here individuals or organizations bring cases to advocate for social or policy changes. This lets judges get involved in matters that might not have gone to court before. This makes a bigger impact on policies and social issues.

Significance of Judicial Activism

Protecting rights

Judicial activism helps ensure that people's rights are upheld and that everyone is treated fairly.

Promoting equality

Judges play an active role in interpreting laws. This helps to prevent discrimination and unfair treatment.

Adapting to change

Judicial activism allows the court system to address new challenges. It adapts laws to fit the current circumstances.

Balancing power

Judges help maintain a balance of power among different branches of government. They prevent any one branch from becoming too powerful.

Checks and balances

Judicial activism serves as a check on the actions of the government. It ensures that it respects the rights of individuals and follows the law.

Caution needed

Activism may lead to decisions based on personal opinions rather than the law itself. Hence, some argue that judges should stick to the original meaning of laws and the Constitution.

Evolution of Judicial Activism in India

Here are the key points about the evolution of judicial activism in India:

- The Indian judiciary was largely passive in the early years of independence. It had a very limited role to play.
- With time, the judiciary started taking a more active approach, especially during the 1970s and 1980s.
 - In the 1970s, many judges began to take a more active role in shaping the law and public policy.
- The Supreme Court of India began interpreting the Constitution in a broader way. It gave importance to fundamental rights and social justice.

	<ul style="list-style-type: none">▪ Public Interest Litigation (PIL) was introduced in the 1980s. This allowed people to go to court on behalf of those who were treated unfairly.▪ One of the most famous examples of judicial activism in India is the case of Kesavananda Bharati v. State of Kerala (1973).<ul style="list-style-type: none">▪ The decision, in this case, marked a turning point in the evolution of judicial activism in India.▪ Since then, the Indian judiciary has become active in shaping the law and public policy.▪ Judicial activism has been a controversial issue in India. However, there is no doubt that judicial activism has played a significant role in shaping the law and public policy in India.
18.	<p>Selection and Appointment of Election Commissioners</p> <ul style="list-style-type: none">▪ Recently, Rajya Sabha passed The Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Office and Terms of Office) Bill, 2023.▪ It provides for the procedure for appointment of the Chief Election Commissioner (CEC) and the other two Election Commissioners (ECs). <p>Constitutional Provisions:</p> <ul style="list-style-type: none">▪ Article 324 provides for the composition of the Election Commission of India (ECI). It consists of the CEC and two other ECs.▪ The Constitution provides that the appointment of the CEC and EC shall, subject to the provisions of any law made by Parliament.▪ While the existing parliamentary law provides for their conditions of service, it is silent with respect to appointments.▪ The appointments till date are made by the President, that is the Central Government and there is no mechanism for ensuring independence during the appointment process. <p>Supreme Court ruling on the same:</p> <ul style="list-style-type: none">▪ A Public Interest Litigation (PIL) filed by Anoop Baranwal in 2015 pleaded for the Supreme Court to issue directions to set up an independent, collegiumlike system for the appointment of the CEC and ECs.▪ The Supreme Court in this case, in March 2023, held that there has been a legislative vacuum due to the absence of any law by Parliament

in the last 73 years with respect to the appointment of the CEC and EC.

- In the past, the Dinesh Goswami Committee on Electoral Reforms (1990) and the Law Commission in its 255th report on Electoral Reforms (2015), had suggested regarding the same.
- They recommended that the CEC and ECs should be appointed by a committee consisting of the Prime Minister, the Chief Justice of India (CJI) and the Leader of the Opposition or the largest Opposition party in the Lok Sabha.
- Considering these recommendations, the Supreme Court, exercising its powers under Article 142 (to issue directions for doing 'complete justice' in any matter), laid down that the CEC and ECs shall be appointed by a committee consisting of the Prime Minister, the CJI and the Leader of the Opposition or the largest opposition party in the Lok Sabha.
- It said that this mechanism shall be in place till Parliament enacts a law on this matter.

What does the proposed law provide?

- The CEC and other ECs shall be appointed from persons who are holding or have held a post equivalent to the rank of Secretary to the Government of India.
- There shall be a search committee headed by the Minister of Law and Justice, who shall prepare a panel of five persons for consideration to the selection committee.
- The CEC and EC shall be appointed by the President on the recommendation of this selection committee consisting of the Prime Minister, the Leader of Opposition in the Lok Sabha and a Union Cabinet Minister to be nominated by the Prime Minister.
- It is for the first time that the Parliament is proposing a structured mechanism for identification of suitable persons for the post of CEC and EC.
- However, this bill removes the CJI from the selection process that was laid down in the Anoop Baranwal case.

Best practices globally

- The international practices for selection and appointment of members to the electoral body varies between different democracies.

- In South Africa, the President of the Constitutional Court, representatives of the Human rights Court and gender equality are involved.
- In the U.K., the House of Commons approves the candidates, whereas in the U.S., the appointment is by the President and confirmed by the Senate.

Supreme Court - Order (March 2023)

- The Supreme Court, in a landmark decision, ruled that the selection of Chief Election Commissioner and Election Commissioners be done by a three-member committee. This committee will comprise of:
 - **Prime Minister**
 - **Leader of the Opposition in Lok Sabha/Leader of the Single Largest Opposition Party**
 - **Chief Justice of India**
- Currently, appointments of CEC and ECs are done by the President on the aid and advice of the Union Cabinet headed by the Prime Minister.
- A five-judge Constitution Bench of the Supreme Court was hearing a bunch of petitions seeking a selection process similar to what is followed in the case of the Director, Central Bureau of Investigation (CBI).
 - The Director of CBI is selected by a committee which consists of Prime Minister, Leader of the Single Largest Opposition Party and the Chief Justice of India.
- The Court has unanimously disapproved of the present system of the Centre appointing members of the poll watchdog.
- Pointing to **Article 324(2) of the Constitution**, the Court has called upon Parliament to make a law regarding the criteria for selection, conditions for service and tenure of the CEC and ECs.
 - According to Article 324(2) of the Constitution, the CEC and ECs shall be appointed by the President, with the aid and advice of the Council of Ministers, **till Parliament enacts a law fixing the criteria for selection, conditions of service and tenure.**
- Justifying its decision, the bench said there is a legislative vacuum as Parliament, in the last seven decades, did not frame a law as envisaged in the Constitution.

	<ul style="list-style-type: none">▪ The Supreme Court ruling, for now, will bring to an end the decades-old practice of the CEC and ECs being appointed on the advice of the Council of Ministers, as is laid down in the Constitution.
19.	<p>ABC OF Comptroller and Auditor-General of India (CAG)</p> <p><i>"I am of the opinion that this dignitary or officer is probably the most important officer in the Constitution of India. He is the one man who is going to see that the expenses voted by Parliament are not exceeded, or varied from what has been laid down by Parliament in the Appropriation Act." —Dr. B.R Ambedkar</i></p> <ul style="list-style-type: none">▪ CAG is an independent authority under the Constitution of India.▪ He is the head of the Indian audit & account department and chief Guardian of Public purse.▪ It is the institution through which the accountability of the government and other public authorities (all those who spend public funds) to Parliament and State Legislatures and through them to the people is ensured.▪ Shri Girish Chandra Murmu is the incumbent CAG of India. <p><u>Office of the CAG - Evolution</u></p> <ul style="list-style-type: none">▪ Office of the Accountant General was established in 1858 (the year the British took over administrative control of India from the East India Company). In 1860 Sir Edward Drummond was appointed as the first Auditor General.<ul style="list-style-type: none">▪ Meanwhile after some restructuring the Auditor General of India came to be called the Auditor and Accountant General to the Government of India.▪ In 1866, the position was renamed Comptroller General of Accounts, and in 1884, it was re-designated as Comptroller and Auditor General of India.▪ Under the Government of India Act 1919, the Auditor General became independent of the government as statutory backing was given for the position.<ul style="list-style-type: none">▪ The Government of India Act 1935 further strengthened the position of the Auditor General by providing for Provincial Auditors General in a federal set-up.

- The act also described the appointment and service procedures and gave a brief overview of the duties of the Auditor General of India.
- The Accounts and Audits Order of 1936 provided detailed accounting and auditing functions of the auditor general.
- This arrangement remained unchanged until India's independence in 1947. After independence, Article 148 of the 1949 Indian Constitution provided for the establishment of a Comptroller and Auditor General to be appointed by the President of India.
 - CAG jurisdiction was extended to Jammu and Kashmir in 1958.
- In 1971 the central government enacted the Comptroller and Auditor General (Duties, Powers, and Conditions of Service) Act, 1971. The act made CAG responsible for both accounting and auditing duties for central and state governments.
 - In 1976 CAG was relieved from accounting functions.
- CAG has undergone rapid computerization and modernization since the 1990s and pervasive nature of Indian corruption has kept CAG vigilant and it has audited and investigated some of the worst and most controversial corruption scandals in Indian history.

Constitutional Provisions regarding the CAG

- **Article 148** broadly deals with the CAG appointment, oath and conditions of service.
- **Article 149** deals with Duties and Powers of the Comptroller and Auditor-General of India.
- **Article 150** says that the accounts of the Union and of the States shall be kept in such form as the President may, on the advice of the CAG, prescribe.
- **Article 151** says that the reports of the Comptroller and Auditor-General of India relating to the accounts of the Union shall be submitted to the president, who shall cause them to be laid before each House of Parliament.
 - The reports of the Comptroller and Auditor-General of India relating to the accounts of a State shall be submitted to the Governor of the State, who shall cause them to be laid before the Legislature of the State.

- **Article 279** –Calculation of "net proceeds" is ascertained and certified by the Comptroller and Auditor-General of India, whose certificate is final.
- **Third Schedule** –Section IV of the Third Schedule of the Constitution of India prescribes the form of oath or affirmation to be made by the Judges of the Supreme Court and the Comptroller and Auditor-General of India at the time of assumption of office.
- **Sixth Schedule**– According to this schedule, the District Council or Regional Council should be kept in such form as the CAG prescribes with the approval of the President. In addition these bodies account are audited in such manner as CAG may think fit, and the reports relating to such accounts shall be submitted to the Governor who shall cause them to be laid before the Council.


CAG in India .vs. the CAG in Britain

- **CAG of India is only performing the role of an Auditor General and not of a Comptroller**but in Britain it has the power of both Comptroller as well as Auditor General.
- In India,**the CAG audits the accounts after the expenditure is committed.**, ex post facto. In the UK no money can be drawn from the public exchequer without the approval of the CAG.
- **In India, CAG is not a member of the parliament**while in Britain; CAG is a member of house of the Commons.

Independence of the Office of CAG Function

- There are several provisions in the Constitution for safeguarding the independence of CAG.
- CAG is appointed by the President by warrant under his hand and seal and provided with tenure of 6 years or 65 years of age, whichever is earlier.
- **CAG can be removed by the President only in accordance with the procedure**mentioned in the Constitution that is the manner same as removal of a Supreme Court Judge.
- He is ineligible to hold any office, either under the Government of India or of any state, once he retires/resigns as a CAG.
- CAG is one of the bulwarks of the democratic system of government in India. The others being the Supreme Court, the Election Commission and the UPSC.
 - No minister can represent the CAG in Parliament.

	<ul style="list-style-type: none">▪ His salary and other service conditions cannot be varied to his disadvantage after appointment.▪ His administrative powers and the conditions of service of persons serving in the Indian Audit and Accounts Department are prescribed by the President only after consulting him.▪ The administrative expenses of the office of CAG, including all salaries, allowances and pensions are charged upon the Consolidated Fund of India that is not subject to vote.
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20.	<p>Marshall Islands</p> <ul style="list-style-type: none">▪ The Republic of the Marshall Islands (RMI) is situated nearly midway between Hawaii and the Philippines.▪ It is the easternmost island group in Micronesia.▪ The country consists of two parallel chains of atolls and islands in the central Pacific Ocean, known as the Ratak (Sunrise) chain and Ralik (Sunset) chain.▪ It is a chain of five volcanic islands and 29 coral atolls in the Pacific Ocean, between Hawaii and the Philippines.▪ It is comprised of approximately 1,225 islands and islets▪ The Marshall Islands uses the US dollar as its currency. <p>Government:</p> <ul style="list-style-type: none">▪ It is a presidential republic with a parliamentary system.▪ The President of the Marshall Islands is both the head of state and the head of government. <p>Economy: Agriculture and tourism are the mainstays of the economy.</p>
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- Strategically, Marshall Islands hosts the US Army Kwajalein Atoll (USAKA) Reagan Missile Test Site, a key installation in the US missile defence network.
- Marshallese citizens can work and study in the US without a visa, and they join the US military at a higher rate than any US state.

History:

- The islands have been under the control of various nations throughout the last few centuries, including Spain from the late 1400s to the late 1800s, Germany from 1885 to World War I, and Japan from 1914 to World War II.
- After World War II, the RMI became a part of the United Nations (UN) Trust Territory of the Pacific Islands under the United States (US) administration.
- The RMI Government was officially established in 1979, following the signing of the Constitution.
- The RMI gained its independence in 1986 after signing the Compact of Free Association with the US, ending the UN-US Trusteeship Agreement.

The Compacts of Free Association (COFA)

- It governs the relationships between the US and the Republic of the Marshall Islands, Federated States of Micronesia, and Republic of Palau known collectively as the Freely Associated States (FAS).
- The governments of the Marshall Islands and Micronesia signed Compacts of Free Association (COFA) with the United States in 1982.
- It granted the Marshall Islands financial assistance and access to many US domestic programmes in exchange for exclusive US military access and defence responsibilities.

Pacific Ocean

- It is the largest ocean in the world.
- It has an area of 165, 246, 200 sq km which is about one-third of the earth's surface area.
- This vast ocean has an area which exceeds the total land area of the world. It stretches to over 16,000 km along the equator.
- It is 14,880 km from Bering-Strait in the north to Cape Adre of the Antarctic continent in the south.
- It has a significant impact on global climate patterns through phenomena like El Niño and La Niña.

	<ul style="list-style-type: none">▪ It hosts several major ocean currents, including the North Pacific Current, the California Current, and the South Equatorial Current. <p>The Pacific Island Countries (PICs)</p> <ul style="list-style-type: none">▪ It is a cluster of 14 island nations dotting the Southwestern Pacific: the Cook Islands, Fiji, Kiribati, the Marshall Islands, Micronesia, Nauru, Niue, Samoa, the Solomon Islands, Palau, Papua New Guinea, Tonga, Tuvalu, and Vanuatu.▪ All these islands are located at the crossroads of strategically important maritime trade corridors.▪ Of the 14 PICs, Fiji and Papua New Guinea (PNG) are the ones with the biggest populations and the most heft.▪ It consists of the three major groups of islands: Melanesia, Micronesia and Polynesia.▪ These countries face common challenges such as climate change, sustainable development, limited resources, and vulnerability to natural disasters. <p>Corals</p> <ul style="list-style-type: none">▪ They are invertebrate animals belonging to a large group of colourful and fascinating animals called Cnidaria.▪ Each coral animal is called a polyp, and most live in groups of hundreds to thousands of genetically identical polyps that form a 'colony'.▪ The colony is formed by a process called budding, which is where the original polyp grows copies of itself.▪ These polyps have microscopic algae called zooxanthellae living within their tissues.▪ The corals and algae have a mutualistic relationship. The coral provides the zooxanthellae with the compounds necessary for photosynthesis. <p>Atolls</p> <ul style="list-style-type: none">▪ They are formed on mid-oceanic ridges.▪ They are shaped circularly or elliptically and are surrounded by seas on all four sides and have shallow waters in the center called a lagoon.
21.	<p>Food adulterants</p> <p>Food Adulteration has been defined comprehensively under the Prevention of Food Adulteration Act, 1954. As per the act, food is adulterated if</p>

- Any low-grade or inexpensive substance that has been replaced wholly or partly in the article making its nature, substance, or quality injurious;
- It contains any other substance which disturbs or is so processed as nature, substance or quality will have injurious effect;
- Any essential component of the article that has been wholly or partly distracted so as to affect injuriously nature, substance, or quality.

According to the Prevention of Food Adulteration Act, 1954 the food articles containing some ingredients in excess of the prescribed amount which is not hazardous for consumption **will not be considered adulterated**.

Most common adulterants

Food Products	Adulterant	Harmful Effects
Milk and Curd	Water and starch powder.	Stomach disorders.
Ghee, Cheese and Butter	Mashed potatoes, Vanaspati and starch powder.	Gastro-intestinal disturbances and other stomach disorders.
Grains	Dust, Pebbles, Stones, Straw, weed seeds, damaged grain, etc.	Liver disorders, Toxicity in the body, etc.
Pulses	Dyes, chemical and Lead Chromate.	Stomach disorders.
Coffee powder	Chicory, tamarind seeds powder.	Diarrhoea.

Tea	Artificial colouring agents.	Liver disorders.
Sugar	Chalk powder, Washing soda, Urea, etc.	Stomach disorders and kidney failure.
Pepper	Dried papaya seeds and blackberries.	Severe allergic reactions including stomach and skin irritations.
Mustard seeds	Argemone seeds.	Abdominal contractions, sluggishness and increased excretion.
Edible Oils	Mineral oil, Karanja oil, castor oil and artificial colours.	Gallbladder cancer, allergies, paralysis, cardiac arrest, and increased LDL cholesterol.
Turmeric Powder	Pesticide residues, sawdust, chalk dust, industrial dyes, metanil yellow dye arsenic, lead metal etc.	Cancer and Stomach disorders.
Chilli and Coriander powder	Redbrick powder, Rhodamine B dye, Red lead, dung powder, soluble salts,	Metal toxicity, Cancer, lead poisoning, tumour, variations in blood pressure and other stomach related disorders.

		water-soluble synthetic colours and other common salts.	
Cinnamon sticks	Cassia bark.	Liver Damage, Low Blood Sugar, Mouth Sores and increased risk of cancer.	
Cumin seeds	Coloured grass seeds, sawdust and charcoal dust	Stomach disorders.	
Jam, Juice and Candies	Non-permitted dyes including metanil yellow and other artificial food dyes.	These dyes are highly carcinogenic that have the potential to cause different types of cancer.	
Jaggery	Washing soda, chalk powder	Vomiting and other Stomach disorders	
Honey	Molasses, dextrose, sugar and corn syrups	Stomach disorders	
Fruits and Vegetables	Chemical dyes, Malachite green, calcium carbide, copper sulphate and oxytocin saccharin wax.	Stomach disorders, vomiting, and dyes used are highly carcinogenic.	

Tomato sauces	Pumpkin pulp, non-edible artificial colours and flavours.	Gastritis and inflammation of vital organs.
Ice Cream	Pepper oil, ethyl acetate, butyraldehyde, nitrate, washing powder. The kind of gum is added which is prepared by boiling different animal parts including the tail, udder, nose, etc.	Dreadful diseases that affect organs including lungs, kidneys, and heart.

1. Milk

A 2012 study conducted by the FSSAI across 33 states found that milk in India was adulterated with diluted water, detergent, fat and even urea.

Some of the adulterants that are used in milk are water, chalk, urea, caustic soda and skimmed milk, while Khoya is adulterated with paper, refined oil and skimmed milk powder.

The level of adulteration in milk is dangerous to so many levels and has the highest chance of causing stomach disorders.

2. Tea/Coffee

Tea and coffee are two most used beverages in India, and thus highly adulterated. Tea leaves are usually adulterated with same coloured leaves, some might not even be edible. Several cases of liver infection across the country have been reported due to consuming adulterated tea.

Coffee seeds, on the other hand are adulterated with tamarind seeds, mustard seeds and also chicori. These adulterants are the main cause of diarrhoea.

3. Wheat and other food grains

Everybody knows that wheat is very commonly adulterated with ergot, a fungus containing poisonous substances and is extremely injurious to health.

4. Vegetables

Beware of the shiny vegetables! Yes, adulteration of vegetables is in news for quite sometime now. Different coloured and textured vegetables are often coloured with different dyes and substances. These vegetables are mostly adulterated with malachite green, a chemical dye which is known to have carcinogenic.

Common adulterants in fruits and vegetables are oxytocin sachharin, wax, calcium carbide and copper sulphate.

Some Commonly Adulterated Foods in the Market

	Turmeric, dals and pulses <ul style="list-style-type: none">• Adulterant: Metanil Yellow and Kesari Dal• Health hazard: Highly carcinogenic, stomach disorders.
	Green Chillies, green peas & other vegetables <ul style="list-style-type: none">• Adulterant : Malachite Green, Argemone seeds• Health hazard: Carcinogenic if consumed over a long period of time
	Mustard Seeds and Mustard Oil <ul style="list-style-type: none">• Adulterant : Argemone seeds, Papaya seeds• Health hazard: Epidemic dropsy and severe glaucoma

5. Sweets

According to Indian regulations, silver must be 99.9 per cent pure if it is used as a food ingredient.

However, with silver becoming expensive many sweet shop owners use silver vark that could contain aluminium. The most common ingredients in making these sweets are khoya and chenna and they're often adulterated with starch. But the good news is that you can test if the sweets are adulterated by boiling a small sample in water, cool it then add a few drops of iodine solution.

22. **Mosquito Control Approaches - PPP 100 - PRELIMS 2024 - 1**

1. Wolbachia Method

The **Wolbachia Method** is a biological method to manipulate mosquito populations and hence reduce transmission of mosquito-borne diseases such as Dengue, Zika, Chikungunya, etc. Wolbachia is a bacteria naturally present

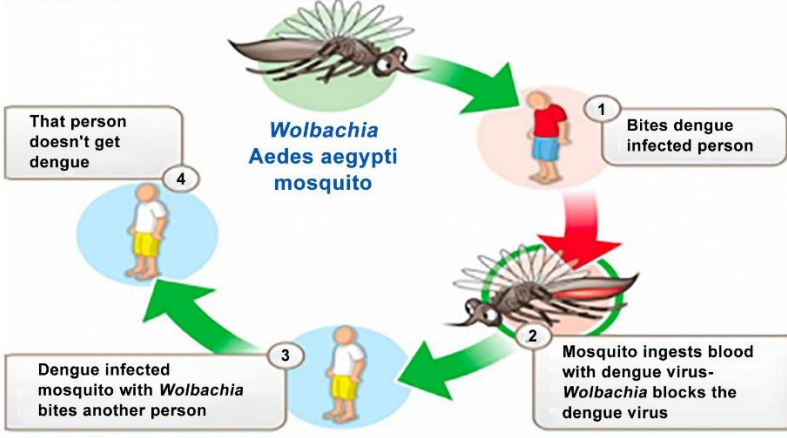
in many insects. The Wolbachia method involves introducing this bacteria in mosquito populations through one of the following methods:

- **Egg Injection:** Wolbachia bacteria is injected into the eggs of *Aedes aegypti* mosquitoes. Thereafter, they are released into the wild.
- **Larval Exposure:** Wolbachia bacteria is introduced into Larvae by exposing it to Wolbachia-infused water.
- **Male Releases:** This method involves releasing Wolbachia-infected male mosquitoes into the wild. These male mosquitos then mate with wild female mosquitos, passing on the bacteria to their offspring.

Wolbachia, once introduced into mosquitoes, has two types of effects:

- Interfering with the reproduction process of mosquitos through a phenomenon called **cytoplasmic incompatibility**. This incompatibility reduces the number of viable offspring of the mosquitos. Thus, the result is a potential decline in the mosquito population.
- **Inhibiting the replication of certain pathogens** within the mosquito. This reduces the ability of mosquitoes to transmit diseases.

As Wolbachia infects the eggs or sperm of its host organism, it is transmitted from one generation of mosquitos to the next. Thus, the bacterium spreads rapidly within the mosquito population, making it a powerful tool in mosquito-borne disease control.

	 <p align="center">Wolbachia Aedes aegypti mosquito</p> <p>1 Bites dengue infected person</p> <p>2 Mosquito ingests blood with dengue virus- Wolbachia blocks the dengue virus</p> <p>3 Dengue infected mosquito with Wolbachia bites another person</p> <p>4 That person doesn't get dengue</p> <hr/> <p align="center">HOW DENGUE FEVER COULD BE ERADICATED BY BACTERIA</p> <p>Dengue: areas at risk</p> <p>Mosquitoes are artificially infected with Wolbachia strains</p> <p>Wolbachia compete against other viruses like Dengue in the mosquito, eventually overthrowing them</p> <p>The mosquitoes are released into the wild where they breed with other mosquitoes</p> <p>Over time, the percentage of mosquitoes carrying Wolbachia grows and outbreaks are reduced</p> <p>This makes it less possible for viruses to be transmitted to people when the mosquito bites them</p> <p>© Leo Delauney / Mailonline</p> <p align="right">Significance of the</p> <p>Wolbachia Method</p> <ul style="list-style-type: none"> ▪ It has the potential to emerge as a groundbreaking strategy for vector-borne disease control. ▪ By providing an effective tool to fight against fatal diseases such as Dengue, Zika, Chikungunya, etc, it can significantly reduce the global burden of illness and mortality. ▪ It could provide a revolutionary approach to control the population of mosquitoes and other unwanted insects. ▪ By providing valuable insights into the intricate relationships between microorganisms and their hosts, it underscores the importance of addressing global health challenges through an interdisciplinary approach.
23.	What is the Prevention of Money Laundering Act (PMLA), 2002?

The PMLA **was enacted in response to India's global commitment (Vienna Convention)** to combat the menace of money laundering. These include:

- - - **United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances 1988**
 - **Basle Statement of Principles, 1989**
 - **Forty Recommendations of the Financial Action Task Force on Money Laundering, 1990**
 - **Political Declaration and Global Program of Action adopted by the United Nations General Assembly in 1990.**
 - It is a criminal law enacted to prevent money laundering and to provide for confiscation of property derived from, or involved in, money-laundering and related matters.
 - It forms the core of the legal framework put in place by India to combat Money Laundering.
 - The provisions of this act are applicable to all financial institutions, banks(**Including RBI**), **mutual funds, insurance companies**, and their financial intermediaries.
- **Recent Amendments:**
 - **Clarification about the Position of Proceeds of Crime:** Proceeds of the Crime not only includes the property derived from scheduled offence but would also include any other property derived or obtained indulging into any criminal activity relate-able or similar to the scheduled offence.
 - **Money Laundering Redefined:** Money Laundering was not an independent crime rather depended on another crime, known as the predicate offence or scheduled offence.
 - The amendment seeks to treat money laundering as a stand-alone crime.
 - Under Section 3 of PMLA, the person shall be accused of money laundering if in any manner that person is directly or indirectly involved in the proceeds of the crime.
 - Concealment
 - Possession

- Acquisition
- Use or projecting as untainted property
- Claiming as untainted property
- **Continuing Nature of Offence:** This amendment further mentioned that the person will be considered to be involved in the offence of money laundering till the time that person is getting the fruits of activities related to money laundering as this offence is of a continuing nature.

Enforcement Directorate

- **History:**
 - The Directorate of Enforcement or the ED is a multi-disciplinary organization mandated with investigation of economic crimes and violations of **foreign exchange laws**.
 - The origin of this Directorate goes back to 1st May, 1956, when an 'Enforcement Unit' was formed in the Department of Economic Affairs for handling Exchange Control Laws violations under Foreign Exchange Regulation Act, 1947 (FERA '47).
 - With the onset of the process of **economic liberalization, FERA, 1973**, which was a regulatory law, was repealed and in its place, **Foreign Exchange Management Act, 1999 (FEMA)** came into operation.
 - Recently, with the increase in the number of cases relating to economic offenders taking shelter in foreign countries, the Government has passed the **Fugitive Economic Offenders Act, 2018 (FEOA)** and ED is entrusted with its enforcement.
- **Functions:**
 - **The PMLA, 2002:**
 - ED has been given the responsibility to enforce the provisions of the PMLA by conducting investigation to trace the assets derived from proceeds of crime, to provisionally attach the property and to ensure prosecution of the offenders and confiscation of the property by the Special court.
 - **The FEMA, 1999:**

- ED has been given the responsibility to conduct investigation into suspected contraventions of foreign exchange laws and regulations, to adjudicate and impose penalties on those adjudged to have contravened the law.
- **The FEOA, 2018:**
 - It is a law whereby the Directorate is mandated to attach the properties of the fugitive economic offenders who have escaped from India warranting arrest and provide for the confiscation of their properties to the Central Government.
- **Sponsoring agency under COFEPOSA:**
 - Under the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA), Directorate is empowered to sponsor cases of preventive detention with regard to contraventions of FEMA.

Serious Fraud Investigation Office

The **Serious Frauds Investigation Office (SFIO)** has arrested the alleged **mastermind of a widespread racket involving the setting up of shell companies** with Chinese links and supply of dummy directors.

- SFIO was assigned by the government to **investigate Jillian Consultants India Pvt Ltd** and 32 other companies.

Shell Companies

- A shell company is a **firm that does not conduct any operations in the economy**, but it is formally registered, incorporated, or legally organized in the economy.
- These are sometimes **used illegitimately, such as to disguise business ownership** from law enforcement or the public.

SFIO

- SFIO is a **multi-disciplinary organization under the Ministry of Corporate Affairs**, consisting of **experts in the field** of accountancy, forensic auditing, law, information technology, investigation, company law, capital market and taxation for **detecting and prosecuting or recommending for prosecution white-collar crimes/frauds**.
 - It has its head office in **New Delhi**.

	<ul style="list-style-type: none">▪ The Computer Forensic and Data Mining Laboratory (CFDML) was set up in 2013 to provide support and service to the officers of SFIO in their investigations.▪ SFIO is headed by a Director as Head of Department in the rank of Joint Secretary to the Government of India.▪ Serious Fraud investigation (SFIO) was initially set up by the Government of India by way of a resolution dated 2nd July, 2003. At that time SFIO did not enjoy a formal legal status.▪ Function and Roles:<ul style="list-style-type: none">▪ Section 211 of the Companies Act, 2013, has accorded statutory status to the Serious Fraud Investigation Office (SFIO).<ul style="list-style-type: none">▪ SFIO also has powers to arrest people for the violation of the Company law.▪ An investigation into the affairs of a company can be initiated by the Central Government and entrusted to the Serious Fraud Investigation Office under the following circumstances:<ul style="list-style-type: none">▪ On receipt of a report of the Registrar or inspector under section 208 (Report on Inspection made) of the Companies Act, 2013.▪ On intimation of a special resolution passed by a company that its affairs are required to be investigated.▪ In public interest.▪ On request from any Department of the Central Government or a State Government.
24.	<p>ABC of Enforcement Directorate</p> <p>Enforcement Directorate (ED) is a premier financial investigation agency and economic law enforcement agency of the Government of India.</p> <ul style="list-style-type: none">▪ Headquarter - New Delhi▪ History - In 1956, an 'Enforcement Unit' was formed in the Department of Economic Affairs.▪ It handled the Exchange Control Laws violations under Foreign Exchange Regulation Act of 1947 (later FERA 1973)▪ In the year 1957, this Unit was renamed as 'Enforcement Directorate'.▪ In 1960, its administrative control was transferred from the Department of Economic Affairs to the Department of Revenue.

- It was regulated under Foreign Exchange Regulation Act (FERA) of 1973 (repealed later).
- The ED currently draws its statutory powers from 3 different acts -
 1. Foreign Exchange Management Act, 1999 (FEMA)
 2. Prevention of Money Laundering Act, 2002 (PMLA)
 3. Fugitive Economic Offenders Act, 2018 (FEOA)
- **Director** - Director is the head of the Enforcement Directorate assisted by special directors.
- The director is appointed in accordance with the provisions of the Central Vigilance Commission Act 2003.
- The Centre appoints the director on recommendation of a high-level committee headed by the Central Vigilance Commissioner.
- The director has a fixed tenure of 2 years and a maximum 3 annual extensions.

Powers and functions of ED

- **Functions** - ED is mandated with investigation of offence of money laundering and violations of foreign exchange laws.
- Enforces the provisions of the PMLA
 - Conducts investigation to trace the assets derived from proceeds of crime and provisionally attach the property.
 - Ensure prosecution of the offenders.
 - Confiscation of the property by the Special court.
- Enforces the provisions of the FEMA
 - Conduct investigation into suspected violations of foreign exchange laws.
 - Adjudicate and impose penalties on those adjudged violations.
- Enforces the provisions of the FEOA
 - ED is mandated to attach the properties of the fugitive economic offenders and confiscate their properties for the central government.
- It is also a sponsoring agency under Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA).
- **Quasi-judicial powers** - Section 50 of the PMLA provides powers of a civil court to the ED authorities for summoning persons suspected of money laundering and recording statements.
- The ***Vijay Madanlal Choudhary v. Union of India (2022)*** case observes that the power under Section 50 of PMLA is of the nature

	<p>of 'inquiry' against the proceeds of crime and is not 'investigation' in strict sense.</p> <ul style="list-style-type: none">Section 19 and Section 45 of the PMLA permits ED authorities to arrest and grant bail. <p>CBI vs ED</p> <ul style="list-style-type: none">Central Bureau of Investigation (CBI) and ED are investigating agencies of the Central Government.They both play an important role but have different roles to play.
25.	<p>HIWISE ICIMOD & GLOBAL BIODIVERSITY FRAMEWORK FUND - PPP 100 - PRELIMS 2024 - 2</p> <p>1. HIWISE - ICIMOD</p> <p>The Hindu Kush Himalaya (HKH) region faces a critical situation, emphasizing the urgency for action and financial support by the International Centre for Integrated Mountain Development (ICIMOD) to prevent the collapse of natural ecosystems in High Mountain Asia.</p> <p>Key points of the ICIMOD's Report</p> <ul style="list-style-type: none">ICIMOD characterizes the HKH region as a "biosphere on the brink," indicating a state of imminent ecological crisis.The organization is hosting the Third Lead Authors meeting of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in Kathmandu. <p>Losses in Nature and Habitat</p> <ul style="list-style-type: none">Experts from ICIMOD express deep concern about the rapid and extensive losses in both nature and habitat within the HKH region, describing them as "catastrophic."Deputy Director General conveys a sense of urgency, suggesting that it may be nearly too late to address the crisis effectively. <p>Biodiversity Hotspots and Protected Areas</p> <ul style="list-style-type: none">The HKH region stands out globally, hosting four of the world's 36 recognized biodiversity hotspots.Additionally, the region boasts 575 Protected Areas and 335 important bird areas, signifying its ecological significance. <p>Impact on Mountain Communities</p> <ul style="list-style-type: none">Despite concerted conservation efforts, a significant portion (70%) of the original biodiversity in the HKH region has been lost over the last century.

	<ul style="list-style-type: none">▪ The dependence of mountain communities, constituting 85% of the region's population, on this biodiversity for fundamental needs like food, water, flood control, and cultural identity is stressed. <p>High Mountain Asia - "Water Tower"</p> <ul style="list-style-type: none">▪ High Mountain Asia, encompassing the Tian Shan, Kunlun Shan, Pamir, Karakoram, Hindu Kush, Tibetan Plateau, and the Himalayas, is termed the "Water Tower of Asia."▪ This region, spanning 3,500 kilometres and eight countries, plays a critical role in providing essential ecosystem services, including clean water for a third of the world's population. <p>Population and Food Security</p> <ul style="list-style-type: none">▪ The HKH region has a population of 241 million people, with 31% categorized as "food-insecure," and half facing some form of malnutrition.▪ Urgent prioritization of investment is advocated to fund efforts against nature loss and species extinction. <p>Call for Urgent Investment</p> <ul style="list-style-type: none">▪ It emphasizes the immediate need to prioritize investment in the HKH region to combat nature loss and prevent the collapse of crucial ecosystems.▪ The call includes a plea for accelerated policy, institutional, and market reforms, along with a rapid increase in integrated global finance, particularly for vulnerable regions like the HKH.
26.	<p>Model Code of Conduct</p> <ul style="list-style-type: none">▪▪ The MCC is a set of guidelines issued by the ECI to regulate political parties and candidates prior to elections.▪ It helps EC in keeping with the mandate it has been given under Article 324 of the Constitution, which gives it the power to supervise and conduct free and fair elections to the Parliament and State Legislatures.▪ The MCC is operational from the date on which the election schedule is announced until the date of the result announcement.▪ Evolution:

- The **origin of the MCC lies in the Assembly elections of Kerala in 1960**, when the State administration prepared a '**Code of Conduct**' for political actors.
- Subsequently, in the Lok Sabha elections in 1962, the **ECI circulated the code** to all recognized political parties and State governments, and it was wholeheartedly followed.
- It was in **1991** after repeated flouting of the election norms and continued corruption, the **EC decided to enforce the MCC more strictly.**
- **MCC for Political Parties and Candidates:**
 - **Prohibitions:**
 - Criticism of political parties must be **limited to their policies and programmes, past record, and work.**
 - Activities such as **using caste and communal feelings** to secure votes, criticizing candidates on the basis of unverified reports, bribing or intimidation of voters, etc. are prohibited.
 - **Meetings:**
 - Parties must **inform the local police authorities of the venue and time** of any meeting in time to enable the police to make adequate security arrangements.
 - **Processions:**
 - If **two or more candidates plan processions** along the **same route**, the political parties must establish contact in advance to ensure that the **processions do not clash.**
 - **Carrying and burning effigies** representing members of other political parties is **not allowed.**
 - **Polling Day:**
 - Only voters and those with a valid pass from the EC are allowed to enter polling booths.
 - All authorized party workers at **polling booths should be given suitable badges or identity cards.**
 - Identity slips supplied by them to voters **shall be on plain (white) paper** and **shall not contain any symbol, name of the candidate or the name of the party.**

▪ **Observers:**

- The EC will appoint observers to whom any candidates may report problems regarding the conduct of the election.

▪ **Party in Power:**

- The MCC incorporated certain restrictions in 1979, regulating the conduct of the party in power. **Ministers must not combine official visits with election work or use official machinery for the same.**
- The party **must avoid advertising at the cost of the public exchequer** or using official mass media for publicity on achievements to improve chances of victory in the elections.
- From the time elections are announced by Commission, the **ministers and other authorities must not announce any financial grants**, or promise any construction of roads, provision of drinking water, etc. **Other parties must be allowed to use public spaces** and rest houses, and these must not be monopolized by the party in power.

▪ **Election Manifestos:**

- The ECI directs that political parties and candidates must adhere to the following guidelines while releasing election manifestos for any election (Parliament/State Legislatures):
 - The election manifesto **shall not contain anything against the ideals and principles enshrined in the Constitution.**
 - Political parties should avoid making **promises that are likely to vitiate the purity of the election processor** exert undue influence on voters.
 - Manifestos should reflect the **rationale for promises** and broadly indicate the ways

	<p>and means to meet the financial requirements for it.</p> <ul style="list-style-type: none">Manifestos shall not be released during the prohibitory period, as prescribed under Section 126 of the Representation of the People Act 1951, for single or multi-phase elections. <p>Some Recent Additions to the MCC:</p> <ul style="list-style-type: none">The regulation of opinion polls and exit polls during the period notified by the ECI.The prohibition of advertisements in print media on polling day and one day prior to it unless the contents are pre-certified by screening committees.The restriction on government advertisements featuring political functionaries during the election period.
27.	<p>CAIPEEX & Short-Lived Halogens - PPP 100 - PRELIMS 2024 - 3</p> <p>CAIPEEX</p> <p>A study for the effectiveness of cloud seeding in enhancing rainfall has been recently conducted under CAIPEEX phase-4 by the Indian Institute of Tropical Meteorology (IITM).</p> <p>Key findings of the study:</p> <ul style="list-style-type: none">All cumulus clouds do not produce rainfall when cloud seeding is done.<ul style="list-style-type: none">Cumulus clouds are detached, individual, cauliflower-shaped clouds usually spotted in fair weather conditions.20-25% of cumulus clouds produce rainfall if cloud seeding is done correctly.The relative enhancement of rainfall was 46% as measured by automatic rain gauges.<ul style="list-style-type: none">However, the actual increase in rainfall was only 18%.The cost of producing water through cloud seeding will drop by more than 50% if indigenous seeding aircraft are used. <p>Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4):</p> <ul style="list-style-type: none">CAIPEEX phase-4 experiments were conducted by the Indian Institute of Tropical Meteorology (IITM), Pune.

- **IITM** is an autonomous institute under the **Ministry of Earth Sciences** (MoES).
- **Objective:** To investigate the **efficacy of hygroscopic seeding** in deep convective clouds and develop a **cloud seeding protocol**.
 - **Convective clouds** are formed by convection, which is the process of warmer air rising since it is less dense than the surrounding atmosphere.
- It aims to understand the complexities of **cloud behaviour, aerosol interactions**, and **precipitation enhancement**.
- **Tools employed:** Two aircraft for cloud parameter study and seeding.
- Specific characteristics within a cloud, such as its **liquid water content, vertical motion** (indicative of its growth), and cloud depth can give an idea if it will rain or not.
- **Convective clouds** over 1 kilometer deep, are likely to evolve into deep cumulus clouds.

Convective Clouds

Convective clouds are formed due to the upward movement of warm, moist air. This movement is termed "convection," and it occurs when the Earth's surface heats up, causing the air just above it to warm, rise, and cool as it gains altitude.

Once the rising air reaches a certain height, the moisture it contains begins to condense into water droplets, forming clouds. Convective clouds often lead to weather events like thunderstorms. They are usually vertically-developed and can vary from small cumulus clouds to larger cumulonimbus clouds capable of producing severe weather conditions.

Aerosols

Aerosols refer to tiny particles or droplets suspended in the air. These can be either natural or human-made and include things like dust, pollen, soot, and even liquid droplets.

Aerosols play a significant role in climate and weather, affecting the Earth's radiation balance and cloud formation. They can scatter sunlight back into space, cooling the Earth, or absorb sunlight, leading to a warming effect

. In the context of cloud seeding, aerosols serve as cloud condensation nuclei, providing a surface for water vapor to condense on, which aids in cloud formation and precipitation.

Cloud seeding:

- **Cloud seeding** is a technique in which cloud-forming particles are used to **increase rainfall**.
- It is of two types: **Hygroscopic** and **Glaciogenic cloud seeding**.


OPENING UP THE CLOUDS

WHAT IS CLOUD SEEDING
A weather-modification technology that can create rain in drought-affected areas and also help fight air pollution

HOW IT WORKS
Scientists use aircraft or rockets to inject silver iodide or another substance into the atmosphere to mimic ice nuclei

HELPING HAND
Clouds often lack naturally occurring ice nuclei, so injecting them with silver iodide particles (which are very similar in structure to ice) increases the number of nuclei

HOW IT HAPPENS
It makes the clouds more efficient at generating ice crystals that either fall as snowflakes or melt to produce raindrops, depending on temperatures in and beneath the cloud. Cloud seeding is also used to disperse fog banks near some airports



The amount of rain or snow a cloud can produce depends on a balance between the number of ice nuclei inside it and the amount of water available to grow around those nuclei

28.

Lord Cornwallis (1786–1793)

Lord Cornwallis: Architect of India's Governance

General Charles Cornwallis, sometimes known as Lord Cornwallis, founded the Indian Civil Service. Between 1753 and 1762, he had the title Viscount Brome, and from 1762 to 1792, Lord Cornwallis went by the name Earl Cornwallis. Following his return from America after the War of Independence, Lord Cornwallis was offered the position of Governor-General. With his selection, a new custom of selecting an aristocrat for the position of Governor-General was started. Lord Cornwallis was lucky to have a team of highly skilled and experienced individuals working for him, including Sir William Jones, John Shore, and James Grant. Even though Cornwallis began his job in a favourable environment, Lord Cornwallis had to implement his policies with considerable care.

Pitt's India Act (1786)

- The Parliament revised **Pitt's India Act in 1786** to give him the authority to, if necessary, overrule the majority vote of his

	<p>council, and it was willing to grant him exceptional legal powers to enact radical reforms in the administration of Bengal.</p> <ul style="list-style-type: none">▪ Policymakers revived it after a series of tax initiatives failed and had a detrimental impact on the economy starting in 1773.▪ The idea of Permanent Settlement was first conceptualised and refined by Sir Philip Francis, a council member under Warren Hastings. It was eventually abandoned due to its “absurdity,” nevertheless.▪ The Permanent Settlement was not Lord Cornwallis’s most significant contribution to the establishment of the British colonial administration in India; rather, it was his military actions to subdue Tipu Sultan of Mysore. <p>Permanent Settlement</p> <p>Containing Tipu Sultan</p> <p>Lord Cornwallis’s Legacy: Civil Service Reforms in India</p> <p>Cornwallis’ most notable achievement was the overhaul of the civil service, which involved hiring qualified and ethical public servants.</p> <ul style="list-style-type: none">▪ Lord Cornwallis is responsible for the Europeanisation of administrative machinery.▪ Lord Cornwallis’ introduction of the merit-based system of recruitment for the Indian Civil Service laid the foundation for a more efficient and effective bureaucracy.▪ Lord Cornwallis established the division of the three service branches—commercial, judicial, and revenue—in the Cornwallis Code (1773).▪ In India, Charles Cornwallis is regarded as the founding father of the civil service. The foundation Warren Hastings set for the civil service was improved, modernised, and clarified by him.▪ The Law of the Company presented the uncovenanted Civil Services, whereas Cornwallis presented the Covenanted Civil Services. <p>Lord Cornwallis’s Judiciary Revamp: Structure and Authority</p>
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Cornwallis endeavoured to accomplish the tasks left incomplete by Warren Hastings while implementing important changes to the judicial system.

- The civil and criminal courts underwent a major reorganisation.
- At the **apex of the judicial system**, the **Sadar Diwani Adalat and Sadar Nizamat Adalat**, respectively, were the highest civil and criminal courts of appeal. Both were headed by the Governor-General and his council.
- There were **four provincial courts of appeal** in India, located in Calcutta, Dacca, Murshidabad, and Patna. Each court had three European judges and two Indian advisors.
- **European judges each presided over the District and City courts.** Each district received a court. He had stripped the tax collectors of their judicial authority and given them total authority over the collection of taxes.
- **District judges were appointed** as a result. Indian judges, called Munsiffs, appointed all courts at the bottom of the legal system.

Lord Cornwallis's Police Reforms: Thanas and Daroga Authority

Restructuring the police administration was necessary for the successful implementation of judicial reforms.

- **Thanas, or police circles**, roughly 20 square miles in size, were used to partition each district.
- It was given to a **daroga**, an Indian officer who had a lot of constables working well with him. On the other side, the police were useless.
- "The **daroga enjoyed nearly unlimited extortion power** and became the scourge of the country," argues Marshman.

Lord Cornwallis's Wars: Diplomacy and Victory in India

**Mysore
Maratha
War
(1785-
1787)**

- **The Marathas tried to draw Lord Cornwallis** into the conflict, which began in 1785 with a series of marches, countermarches, and skirmishes.
- Cornwallis adhered to the **neutrality policy** and stayed out of the war simulation.
- After much effort, Tipu Sultan and the Marathas finally agreed to keep peace in 1787 by signing the **Treaty of Gajendragarh.**

Third Anglo-Mysore war (1790–1792)

- A clause pertaining to the transfer of prisoners was included in the **Mangalore Treaty of 1784**, which was signed at the conclusion of the Second Anglo-Maratha War. Tipu disregarded this and continued to hold the British prisoners.
- Tipu was kept apart from the Marathas, Coorgs, and Nizams by **Cornwallis' diplomatic skills**. Tipu was defeated as a result.
- The **Treaty of Shrirangpatnam (1792)**, which was concluded in 1792, helped to reestablish peace.

Lord Cornwallis's Triumph: Military Success and Governance

The Permanent Settlement was not Lord Cornwallis's most significant contribution to the establishment of the British colonial administration in India; rather, it was his military actions to subdue Tipu Sultan of Mysore.

- Lord Cornwallis personally oversaw a military operation against the **Sultan of Mysore in 1790** and won the Company State control over a crucial portion of his country.
- By defeating Tipu Sultan and compelling him to sign a predetermined peace treaty, Cornwallis dramatically increased the company's security.
- In recognition of Lord Cornwallis's accomplishments on the battlefield and in building a powerful administrative, judicial, and military system for the new kingdom, Cornwallis was given the **title of First Marquis in August 1792**.

29. **Drug trafficking in India**

Drug trafficking in India is a serious issue that poses challenges to the social, economic, and political fabric of the country. The illegal trade of drugs has been a persistent problem, and it continues to evolve and become more sophisticated with new technologies and methods.

The emergence of darknet markets and increased use of maritime routes has posed new challenges in the fight against drug trafficking in India. It is important to address these emerging challenges with innovative solutions to ensure the well-being and safety of society.

According to the Narcotics Control Bureau (NCB)'s latest annual report, **drug trafficking through sea routes in the Arabian Sea and the Bay of Bengal accounts for around 70% of the total illegal drugs smuggled into India.** The use of maritime routes by international drug syndicates based in Pakistan and Afghanistan is expected to increase.

The UN Office on **Drugs and Crime's World Drug Report 2022** revealed that **India is one of the world's largest opiate markets in terms of users and is vulnerable to increased supply from Afghanistan.** Punjab and Himachal Pradesh are leading in India's epidemic of opioid users, while Gujarat is now the third worst state in terms of drug overdose deaths.

A survey report by the Ministry of Social Justice & Empowerment (MoSJE) in 2019 showed that **drug consumption in India has increased compared to the survey report in 2004.**

Over 60% of the darknet is being used for illegal drug trade due to its anonymity and low risks. The use of cryptocurrency payments and courier services for doorstep delivery has made darknet transactions more appealing than traditional drug markets.

Apart from narcotics, India has been experiencing a significant rise in the use of **psychotropic substances and medicinal preparations** among addicts since late 1990.

Alkaloids

- Alkaloids are a huge group of naturally **occurring organic compounds which contain nitrogen atom or atoms** (amino or amido in some cases) in their structures.
- These nitrogen atoms cause alkalinity of these compounds.
- Well-known alkaloids include **morphine, strychnine, quinine, ephedrine, and nicotine.**
- The medicinal properties of alkaloids are quite diverse. Morphine is a powerful narcotic used for the relief of pain, though its addictive properties limit its usefulness. Codeine, the methyl ether derivative of morphine found in the opium poppy, is an excellent analgesic that is relatively nonaddictive.

Poppy Straw:

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- Poppy straw is the **husk left after the opium is extracted** from pods.

- This poppy straw also contains a **very small morphine content** and if used in sufficient quantities, poppy straw can give a high.
- **Possession, sale, use**, etc. of poppy straw is **regulated by the State Governments** under the **State Narcotic Drugs & Psychotropic Substances Rules**.
- Farmers sell the poppy straw to those licensed by the State Governments to purchase poppy straw.
 - Any excess poppy straw is ploughed back into the field.
- Poppy straw is one of the narcotic drugs under the **Narcotic Drugs & Psychotropic Substances Act 1985 (NDPS Act)**.
 - Hence, anyone possessing, selling, purchasing or using poppy straw **without a license or authorization or in violation** of any conditions of the license is liable to prosecution under the NDPS Act.
- **Current Extraction of Alkaloids:**
 - India currently only **extracts alkaloids from opium gum** at facilities controlled by the Revenue Department in the Ministry of Finance.
 - This entails farmers extracting gum by manually lancing the opium pods and selling the gum to government factories.
 - The Ministry has now decided to **switch to new technologies**, after trial cultivation by two private firms showed higher extraction of alkaloids using the **Concentrated Poppy Straw (CPS)**. Thus, the Government is mulling the idea of using public-private partnership (PPP).
- **Partnership Model:**
 - Two types of Narcotic Raw Material (NRM) can be produced from opium poppy - **Opium gum and Concentrate of Poppy Straw (CPS)**.

- So far, only opium gum has been produced in India. The Government of India has now decided that CPS production should be commenced in India.
- The various stakeholders will frame an appropriate model including **public-private partnership (PPP)**, advise on the changes needed to the rules and laws to facilitate private investment, and recommend security measures to protect the crop and the final product.
- The firms carrying out the **trials faced legal hassles** in terms of getting relevant licences from the State governments to manufacture bulk alkaloids on their premises, this issue will need to be ironed out.
- As per the trials' findings, the **imported seeds of certain CPS varieties worked effectively in Indian fields** and their narcotic raw material yield was much higher from imported seeds instead of those used currently.
- Some firms also **cultivated CPS with hydroponic and aeroponic methods** under a greenhouse environment.
 - Both Hydroponics and Aeroponics are sustainable, water-conservative farming methods, differing only by the medium which is used in the growth of the plants.
- **Significance of the Move:**
 - While alkaloid extraction from the current opium crop using the CPS was found more than opium gum, it is possible to have two or three crop cycles in one year if CPS varieties of seeds are used in an indoor greenhouse environment.
 - **India's opium crop acreage has been steadily declining** over the years and using the CPS extraction method is expected to help cut the occasional dependence on imports of products like codeine (extracted from opium) for medicinal uses.

Opium Cultivation In India

- After independence, the control over cultivation and manufacture of opium became **responsibility of the Central Government** with effect from April, 1950.
- At present the **Narcotics Commissioner** along with the subordinates exercises all **powers and performs all functions** relating to superintendence of the cultivation of the opium poppy and production of opium.
 - The Commissioner derives this power from the **Narcotic Drugs & Psychotropic Substances Act 1985 and Narcotic Drugs & Psychotropic Substances Rules, 1985.**
 - **License for manufacture** of certain types of narcotic drugs and psychotropic substances as well as permits for export and import of narcotic drugs, psychotropic and controlled substances are issued with the approval and permission of the Narcotics Commissioner.
- The Government of India announces the **licensing policy for cultivation of opium poppy every year**, prescribing the minimum qualifying yield for issue of or renewal of licence, maximum area that can be cultivated by an individual cultivator, the maximum benefit that can be allowed to a cultivator for damage due to natural causes, etc.
- The opium poppy can be cultivated only in such tracts as are **notified by the Government.**
 - At present these **tracts are confined to three States, viz. Madhya Pradesh, Rajasthan and Uttar Pradesh.**
 - **Mandsaur district** of Madhya Pradesh and **Chittorgarh and Jhalawar Districts of Rajasthan** constitute about **80% of the total area cultivated.**
- India is one of the few countries **internationally permitted (by the United Nations Office on Drugs and Crime) to cultivate opium poppy for export.**

Uses

- Opium is unique in its therapeutic value and is indispensable in the medical world.

MARCH 2024

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| <ul style="list-style-type: none">▪ It also finds use in Homeopathy and Ayurveda or Unani systems of indigenous medicines.▪ The opium which is used as Analgesics, Anti-Tussive, Anti spasmodic and as a source of edible seed-oil, acts as a medicinal herb. |
|--|