CURRENT AFFAIRS

(Coverage from 24th April to 23rd May)

CONTENTS

- Renovation of traditional and other water bodies/tanks,
- Reuse of water and recharging of structures,
- Watershed development and
- Intensive afforestation.

Way Forward

- Rainwater harvesting is a critical intervention and should be undertaken intensively in the identified 256 water-stressed districts.
- There is a need to put in place policy measures for regulated water use and saving measures, such as water metering and pricing.
- There is a need for wastewater policy both for urban and rural areas that promotes water use efficiency, recycling and reuse.
- Wastewater treatment and reuse of reclaimed water for non-potable and industrial purposes becomes a critical alternative to fresh water production and supply.

Epidemic Disease Act, 1897

The Union government directed States and Union Territories to invoke the Epidemic Disease Act, 1897 to fight the Covid-19 outbreak.

- The colonial-era Act empowers the state governments to take special measures and prescribe regulations in an epidemic. It also defines penalties for disobedience of these regulations, and provides for immunity for actions taken under the Act "in good faith".

Key Points

- Aim:
  - The Epidemic Diseases Act aims to provide for the better prevention of the spread of dangerous epidemic diseases.
  - Under the act, temporary provisions or regulations can be made to be observed by the public to tackle or prevent the outbreak of a disease.
- Powers to Central Government:
  - Section 2A of the Act empowers the central government to take steps to prevent the spread of an epidemic.
  - Health is a State subject, but by invoking Section 2 of the Epidemic Diseases Act, advisories and directions of the Ministry of Health & Family Welfare will be enforceable.

- It allows the government to inspect any ship arriving or leaving any post and the power to detain any person intending to sail or arriving in the country.
- Penalty for Disobedience:
  - Section 3 provides penalties for disobeying any regulation or order made under the Act. These are according to section 188 of the Indian Penal Code (Disobedience to order duly promulgated by a public servant).
- Legal Protection to Implementing Officers:
  - Section 4 gives legal protection to the implementing officers acting under the Act.
- Enforcement of the Act in the Recent Past:
  - The Epidemics Diseases Act is routinely enforced across the country for dealing with outbreaks of diseases such as Swine Flu, Dengue.
  - For Example, in 2009, to tackle the swine flu outbreak in Pune, Section 2 powers were used to open screening centres in civic hospitals across the city, and swine flu was declared a notifiable disease.

Background

- Context: The Epidemic Diseases Bill was introduced in 1897, during an outbreak of bubonic plague.
- Need: Since the existing laws were insufficient to deal with various matters such as "overcrowded houses, neglected latrines and huts, accumulations of filth, insanitary cowsheds and stables, and the disposal of house refuse.
- Special Powers: The Bill had called for special powers for governments of Indian provinces and local bodies, including to check passengers of trains and sea routes.
- Global Concern: The government of the day was also concerned that several countries were alarmed by the situation in India. As Russia had speculated that the whole subcontinent might be infected due to plague.

Recent Changes in the Epidemic Diseases Act, 1897

- Recently, the Cabinet amended the Act through an ordinance stating that commission or abetment of acts of violence against healthcare service personnel shall be punished with imprisonment for a term of three months to five years, and with fine of ₹50,000 to ₹2 lakh.

necessary and the allowing faster internet (3G or 4G) on a trial basis over certain geographical areas. Along with that, there is need of focusing the judgment of bhasin's case so that fundamental rights of citizens can be preserved.

Anuradha Bhasin vs Union of India, 2020

- **Fundamental Rights Under Article 19:**
  - The judgement declared that the **freedom of speech and expression** and the **freedom to practice any profession** or carry on any trade, business or occupation **over the medium of Internet** enjoys **constitutional protection under Article 19(1)(a) and Article 19(1)(g)** respectively.
  - It also ruled that such freedom is **not absolute**, the restrictions imposed on it should be in consonance with the mandate under **Article 19(2) and Article 19(6) of the Constitution**.
- **Territorial Extent of Internet Suspensions:**
  - It had also directed authorities to pass internet suspension orders with respect to **only those areas, where there is absolute necessity of such restrictions to be imposed**.
- **Constitution of Review Committee:**
  - The Court also directed the government **to constitute a review committee** to review orders **leading to suspension and shutting down of Internet, mobile and fixed line telecommunication services.**
    - All orders leading to suspension and shutting down of Internet, mobile and fixed line telecommunication services are issued under **Rule 2 (2) of the Temporary Suspension of Telecom Services [Public Emergency or Public Service] Rules, 2017.**
    - These are the rules to be followed if the government intends to temporarily suspend telecom services in any part of the country.
    - These rules have been framed by the government on the basis of the powers conferred by **section 7 of the Indian Telegraph Act, 1885.**
  - The Review Committee shall consist of **State as well as Central level officials** as the issue involved affects not only the UT of Jammu and Kashmir but also the whole country.

Saras Collection

Recently, the Indian government launched the **Saras Collection** on the **Government e Marketplace (GeM) portal**.

- It is a **unique initiative** by the **GeM**, **Deendayal Antyodaya Yojana-National Rural Livelihoods Mission** (DAY-NRLM) and **Ministry of Rural Development**.

Key Points

- The Saras Collection **showcases daily utility products made by rural Self-Help Groups (SHGs)** and **aims** to provide SHGs in rural areas with **market access** to Central and State Government buyers.
- The Saras Collection will **provide SHGs with direct access to Government buyers** which will **do away with intermediaries** in the supply chain, thus **ensuring better prices** for SHGs and **spurring employment opportunities** at the local level.
- **Mechanisms**:
  - **For Functionaries**: They will be provided dashboards at the national, state, district and block level for real time information about the number of products uploaded, their value and volume of orders received and fulfilled.
  - **Government buyers**: They will be sensitized through system generated messages/ alerts in the Marketplace about availability of SHG products on the portal.
- GeM will **collaborate with State functionaries** to address the **capacity building and training needs** of SHGs and **build up their competencies** required for order packaging, catalogue management and logistics.
- GeM will **develop online learning resources in vernacular content** for SHGs with inputs and assistance from the NRLM and the **State Rural Livelihoods Missions** (SRLMs).

Government e-Marketplace

- GeM is a one-stop **National Public Procurement Portal** to facilitate **online procurement of common use goods and services** required by various central and state government departments/organizations/ public sector undertakings (PSUs).
- It was **launched in 2016** to bring transparency and efficiency in the government buying process.
- It has been developed by **Directorate General of Supplies and Disposals** (Ministry of Commerce and Industry) with technical support of **National e-governance Division** (Ministry of Electronic and Information Technology).
- It **functions under Directorate General of Supplies and Disposals** (DGS&D), Ministry of Commerce and Industry.

- It recommended that **India's defence budget** should be in the range of **2.5-3% of GDP** (Gross Domestic Product), in view of current and future threats.

- It had also suggested the establishment of a **Joint Services War College for training of middle-level officers**, with three separate war colleges at Mhow (Madhya Pradesh), Secunderabad (Telangana) and Goa, focusing on training younger officers.

- The committee had also mooted for the **Military Intelligence School** at Pune to be converted to a tri-service intelligence training establishment.

- The recommendations on the creation of the Chief of Defence Staff post and a Department of Military Affairs have been already implemented.

- **Restructuring of Army headquarters**

  - The Army headquarters had instituted 4 studies with an overall aim to enhance the operational and functional efficiency of the force, optimize budget expenditure, facilitate modernization and address aspirations.

  - These studies are Re-organisation and right-sizing of the Indian Army, Re-organisation of the Army Headquarters, Cadre review of officers and Review of terms of engagement of rank and file.

- **Government Owned Contractor Operated (GOCO) Model**

  - In the model, the assets owned by the government are operated by the private industries.

  - The main advantage of the model is that it is efficient and will boost competitiveness among the private entities.

- Closure of Military Farms and Army Postal Establishments in peace locations.

- Other recommendations which have been implemented include, optimisation of signals establishments, restructuring of repair units, redeployment of ordnance echelons, better utilisation of supply and transportation units and animal transport entities, etc.

Annulment of Election of MLA

The Gujarat High Court has set aside the election of a BJP leader in 2017 on grounds of "corrupt practice" and "manipulation of record".

Key Points

- The order passed on a petition, filed by the opposing Congress candidate, alleged that the returning officer had illegally rejected 429 votes received via postal ballot.

- The Court held election as void under Section 100(1)(d)(iv) of the **Representation of the People Act, 1951.**

- The observation gains relevance since the number of rejected votes (429) was more than the victory margin (327).

- The judgment also held that the **instructions of the Election Commission was not followed**, giving an unfair advantage to the winning candidate and thus materially affecting the election.

Election to the State Legislature

- The **Constitution of India as well as the Parliament of India** has laid down qualifications and disqualifications for being elected as a member of State Legislative Assembly and State Legislative Council.

- We can study about various provisions on the same in the table given below.

Qualifications	

■ **Constitutional Provisions:**
  ● Citizenship of India.
  ● Subscription to an oath or affirmation before the person authorised by the Election Commission.
  ● Age must be not less than **25 years for the legislative assembly** and **not less than 30 years for the legislative council**.
  ● Need to possess other qualifications **prescribed by Parliament.**
	■ **Parliamentary Provisions (RPA, 1951):**
	  ● A person to be elected to the legislative assembly must be an **elector for an assembly constituency** in the concerned state.
	  ● A person to be elected to the legislative council must be an elector for an assembly constituency in the concerned state and to be qualified for the governor's nomination, he **must be a resident in the concerned state.**
	  ● He must be a member of a scheduled caste or scheduled tribe if he wants to contest a seat reserved for them. However, a member of scheduled castes or scheduled tribes can also contest a seat not reserved for them.

Disqualifications	
■ **Constitutional Provisions:** ● Any **office of profit** under the Union or State government(except that of a minister or any other office exempted by the state legislature). ● **Unsound mind** and stands so declared by a court. ● **Undischarged insolvent**. ● Not a citizen of India or has voluntarily acquired the citizenship of a foreign state or is under any acknowledgement of allegiance to a foreign state. ● Disqualified under any law made by Parliament.	■ **Parliamentary Provisions** (**RPA, 1951**) ● Must **not** have been found guilty of certain **election offences or corrupt practices** in the elections. ● Must **not** have been convicted for any offence resulting in **imprisonment for two or more years.** But, the detention of a person under a **preventive detention law is not a disqualification**. ● Must **not fail** to lodge an account of **election expenses** within the time. ● Must **not** have any interest in **government contracts**, works or services. ● Must **not** be a **director** or managing agent nor hold an office of profit in a corporation in which the **government has at least 25% share.** ● Must **not** have been **dismissed from government service** for **corruption** or **disloyalty to the state**. ● Must **not** have been convicted for promoting enmity between different groups or for the **offence of bribery**. ● Must **not** have been punished for preaching and practicing **social crimes** such as untouchability, dowry and sati.
NOTE: On the question of whether a member has become subject to any of the above disqualifications, the governor's decision is final. However, he should obtain the opinion of the Election Commission and act accordingly.	

Election Petition

■ The Constitution lays down that **no election to the Parliament or the state legislature** is to be questioned except by an election petition presented to such authority and in such manner as provided by the appropriate legislature.

■ Since 1966, the **election petitions are triable by High Courts alone**. Whereas the appellate jurisdiction lies with the Supreme Court alone.

■ Article 323 B empowers the appropriate legislature (Parliament or a state legislature) to establish a tribunal for the adjudication of election disputes.

● It also provides for the exclusion of the jurisdiction of all courts (except the special leave appeal jurisdiction of the Supreme Court) in such disputes.

● So far, no such tribunal has been established.

■ In **Chandra Kumar case (1997)**, the clause of the exclusion of the jurisdiction of all courts in election disputes was declared unconstitutional by the Supreme Court.

■ Consequently, if at any time an election tribunal is established, an appeal from its decision lies to the high court.

SAMARTH ERP

The **Ministry of Human Resource Development (MHRD)** has developed an **e-governance platform 'SAMARTH Enterprise Resource Planning (ERP) '** under the **National Mission of Education in Information and Communication Technology Scheme (NMEICT)**.

Key Points

■ SAMARTH ERP is an **open source, open standard enabled robust, secure, scalable, and evolutionary process automation engine** for Universities and Higher Educational Institutions.

● **Enterprise Resource Planning (ERP)** refers to a type of software used to manage day-to-day business **activities such as accounting, procurement, project management, risk management and compliance, and supply chain operations.**

● ERP in a University can improve management and administration.

■ The platform has been implemented at the **National Institute of Technology (NIT), Kurukshetra,** a participating unit under the World Bank-supported **Technical Education Quality Improvement Program (TEQIP).**

◆ The Labour Department or the labour court will not interfere in the action taken by industries.

● **Major relaxations to new industrial units are:**

◆ Exempted from provisions on **'right of workers',** which includes obtaining details of their health and safety at work, to get a better work environment which include drinking water, ventilation, crèches, weekly holidays and interval of rest, etc.

◆ Employers are exempt from penalties in case of violation of labour laws.

Rationale Behind the Changes in Labour Laws

- States have begun easing labour laws to **attract investment** and **encourage industrial activity**.

- It intends to **protect the existing employment**, and to provide employment to workers who have migrated back to their respective states.

- It aims to **bring transparency** in the administrative procedures and convert the challenges of a distressed economy into opportunities.

- It aims to **increase the revenue of states** which have fallen due to closure of industrial units during Covid-19 lockdown.

Issues Involved

- The labour law changes will allow more factories to operate **without following safety and health norms** and give a free hand to new companies to **"keep labourers in service as per their convenience".**

- It may deny the rights of workers is a **violation of human and fundamental rights**.

- The changes may lead to **exploitation of workers**.

Constitutional basis of the labour laws

- These enactments further the **Directive Principles of State Policy**.

- These laws also protect the right to life and the right against exploitation under **Articles 21 and 23.**

Way Forward

- Being a concurrent list subject, amended labour laws may require the **Centre's assent**. Centre is expected to consider the labour reforms through consolidated codes for wages, industrial relations and occupational safety, health and working conditions.

● The centre is **not expected** to consider such **exemptions from legal safeguards and protections**.

- It is a **constitutional duty** of the government to ensure just, humane conditions of work and maternity benefits.

- The health and strength of the workers **cannot be ignored by force of economic necessity**. Thus, labour laws are civilisational goals and cannot be sidelined on the excuse of a pandemic.

Atmanirbhar Bharat and Economic Stimulus

The government has announced the **'Atmanirbhar Bharat Abhiyan (or Self-reliant India Mission)'** with an economic stimulus package aimed towards achieving the mission.

- The package is expected to focus on **land, labour, liquidity and laws**.

Self-Reliant India Mission

- The Self-Reliant India Mission aims towards cutting down import dependence by focussing on substitution while improving safety compliance and quality goods to gain global market share.

● The Self-Reliance neither signifies any exclusionary or isolationist strategies but involves creation of a helping hand to the whole world.

- The Mission focuses on the importance of promoting **"local"** products.

- **The Mission will be carried out in two phases:**
  - **Phase 1:** It will consider sectors like medical textiles, electronics, plastics and toys where local manufacturing and exports can be promoted.
  - **Phase 2:** It will consider products like gems and jewellery, pharma and steel, etc.
- **The Mission would be based on five pillars namely,**
  - Economy
  - Infrastructure
  - System
  - Vibrant Demography
  - Demand
- The Mission is also expected to complement **'Make In India Initiative'** which intends to encourage manufacturing in India.

Economic Stimulus

- The announced economic stimulus is worth ₹**20-lakh-crore** package to deal with the Covid-19 pandemic.
- The announced economic package is **10% of India's Gross Domestic Product (GDP)** in 2019-20.
- The amount **includes** packages already announced at the beginning of the lockdown incorporating measures from the RBI and the payouts under the Pradhan Mantri Garib Kalyan Yojana.
- The announced Economic Stimulus consists of five tranches includes,
  - **Economic Stimulus-I :** It includes liquidity measures for businesses, especially Micro, Small and Medium enterprises (MSMEs),
  - **Economic Stimulus-II :** It contains the short term and long-term measures for supporting the poor, including migrants, farmers, tiny businesses and street vendors.
  - **Economic Stimulus-III :** It includes measures to strengthen Infrastructure Logistics, Capacity Building, Governance and Administrative Reforms for Agriculture, Fisheries and Food Processing Sectors.
  - **Economic Stimulus -IV :** It focuses on eight sectors namely, coal, minerals, defence production, civil aviation, power distribution, social infrastructure, space and atomic energy.
  - **Economic Stimulus-V :** It contains measures for providing employment and support to businesses, state governments as well sectors such as education and health

Analysis of Declared Economic Stimulus

- **Inclusion of RBIs' Expenditure in Fiscal Package:**
  - The declared package is considered to be substantially less because it includes the actions of RBI as part of the government's **"fiscal" package**, even though only the government controls the fiscal policy and not the **RBI (which controls the 'monetary' policy).**
  - Thus, the Government expenditure and RBI's actions are neither the same nor can they be added in this manner. And thus nowhere in the world fiscal packages are declared in this manner.
  - For instance, when the US announced a **relief package of $3 trillion (₹225 lakh crore)**, it only refers to the money that will be spent by the government — and does not include the expenditure of the Federal Reserve (US central bank).
- **Implication of Inclusion of RBIs' Expenditure:**
  - If the government is including RBI's liquidity decisions in the calculation, then the actual fresh spending by the government could be considerably lower.
    - That's because RBI has been coming out with **Long Term Repo Operation (LTRO)**, to infuse liquidity into the banking system worth Rs 1 lakh crore at a time. If RBI launches another LTRO of Rs 1 lakh crore, then the overall fiscal help falls by the same amount.
  - The direct expenditure by a government usually includes wage subsidy or direct benefit transfer or payment of salaries, etc — immediately and necessarily stimulates the economy. In other words, that money necessarily reaches the people — either as through salary or purchase.
  - But measures from RBI include credit easing— that is, making more money available to the banks so that they can lend to the broader economy — is not like government expenditure.
    - In times of crisis, banks may take that money from RBI and, instead of lending it, may park it back with the RBI.
    - Recently, Indian banks have parked Rs 8.5 lakh crores with the central bank. So in terms of calculations, RBI has given a stimulus of Rs 6 lakh crore. But in reality, RBI has received an even bigger amount back from the banks.

- The existing bilateral treaties between India and Nepal have not taken the shifting of Himalayan rivers into consideration. A primary reason for this is the lack of an approach where ecological concerns and needs of rivers are often discussed.
  - Therefore, India and Nepal should try to resolve the boundary dispute by taking into account all shared environmental characteristics.

India-China Border Dispute

The number of recorded Chinese transgressions across the disputed India-China border surged by 75% in Ladakh in 2019. The first four months of 2020 have also witnessed an increase compared to 2019.
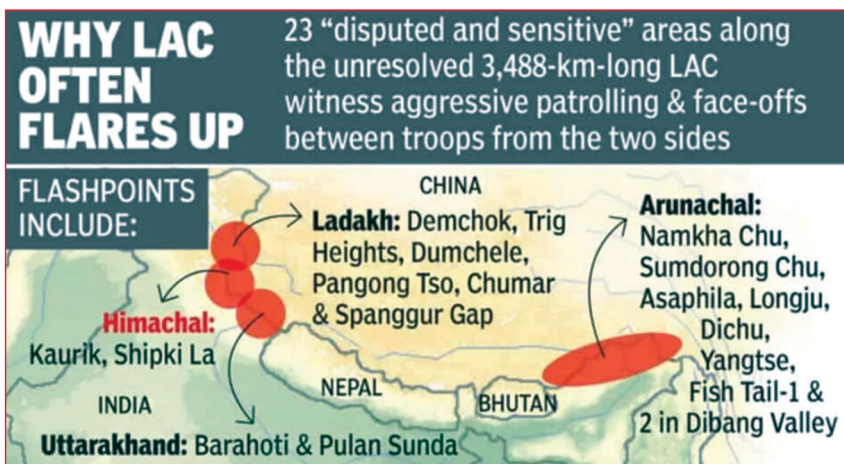
Key Points

- **Reason:**
  - The border between India and China is not fully demarcated and the Line of Actual Control (LAC) is neither clarified nor confirmed by the two countries.
  - This leads to different perceptions of the LAC for the two sides while soldiers from either side try to patrol the area.
- **Data Analysis:**
  - Official data shows that 80% of Chinese transgressions across the LAC since 2015 have taken place in four locations of which three are in eastern Ladakh in the western sector.
    - These areas of eastern Ladakh are Pangong Tso, Trig Heights and Burtse.
    - The fourth area is the Dichu Area/Madan Ridge area (Arunachal Pradesh) of the Eastern sector.
- **Implications of Increased Number of Transgressions:**
  - It is an indicator of increased Chinese assertiveness.
  - The increased transgressions lead to more tensions between both countries which are already struggling to contain the Covid-19 pandemic.
  - The constant accusations on each other also cause tensions and disrupt the peace on borders.

- Recently, Chinese media accused India of building defence facilities in the Galwan Valley region of the contested Aksai Chin area.
- India is also worried about the tensions at Naku La in Sikkim and Pangong Tso in Ladakh.
  - Recently, Indian and Chinese troops engaged in a temporary and short duration face-off along the Line of Actual Control (LAC) at Naku La (Sikkim) and near Pangong Tso Lake (the world's highest saltwater lake which is located in eastern Ladakh).
- India and China are both nuclear-armed countries with strong militaries and the constant border conflicts are not a desirable thing.

India-China Border

- **Demarcation Line:** The Line of Actual Control (LAC) is the demarcation that separates Indian-controlled territory from Chinese-controlled territory.
- **LAC is different from the Line of Control (LoC) with Pakistan:**
  - The LoC emerged from the 1948 ceasefire line negotiated by the United Nations (UN) after the Kashmir War. It was designated as the LoC in 1972, following the Shimla Agreement between the two countries. It is delineated on a map signed by the Director General of Military Operations (DGMO) of both armies and has the international sanctity of a legal agreement.
  - The LAC, in contrast, is only a concept – it is not agreed upon by the two countries, neither delineated on a map or demarcated on the ground.

WHY LAC OFTEN FLARES UP

23 "disputed and sensitive" areas along the unresolved 3,488-km-long LAC witness aggressive patrolling & face-offs between troops from the two sides

FLASHPOINTS INCLUDE:

CHINA

Ladakh: Demchok, Trig Heights, Dumchele, Pangong Tso, Chumar & Spanggur Gap

Arunachal: Namkha Chu, Sumdorong Chu, Asaphila, Longju, Dichu, Yangtse, Fish Tail-1 & 2 in Dibang Valley

Himachal: Kaurik, Shipki La

NEPAL   BHUTAN

INDIA

Uttarakhand: Barahoti & Pulan Sunda

- **Length of the LAC:** India considers the LAC to be 3,488 km long, while the Chinese consider it to be only around 2,000 km.
- **Sectors Across the LAC**:
  - It is divided into three sectors: the eastern sector which spans Arunachal Pradesh and Sikkim (1346 km), the middle sector in Uttarakhand and Himachal Pradesh (545 km), and the western sector in Ladakh (1597 km).
    - The alignment of the LAC in the eastern sector is along the 1914 McMahon Line.
    - The McMohan line marked out previously unclaimed/undefined borders between Britain and Tibet.
  - The middle sector is the least disputed sector, while the western sector witnesses the highest transgressions between the two sides.
- **Disagreements:**
  - India's claim line is different from that of the LAC. It is the line seen in the official boundary marked on the maps as released by the Survey of India, including both Aksai Chin and Gilgit-Baltistan (hilly region north to the Pakistan Occupied Kashmir (PoK).
    - Recently, China has teamed up with Pakistan in the Gilgit-Baltistan region to build the Diamer-bhasha dam.
  - In China's case, LAC corresponds mostly to its claim line, but in the eastern sector, it claims the entire Arunachal Pradesh as South Tibet.
  - The claim lines come into question when a discussion on the final international boundaries takes place, and not when the conversation is about a working border i.e. LAC.

Aksai Chin

- During the time of British rule in India, two borders between India and China were proposed- Johnson's Line and McDonald Line.
  - The **Johnson's line** (proposed in 1865) shows Aksai Chin in erstwhile Jammu and Kashmir (now Ladakh) i.e. under India's control whereas **McDonald Line** (proposed in 1893) places it under China's control.
  - India considers Johnson Line as a correct, rightful national border with China, while on the other hand, China considers the McDonald Line as the correct border with India.
- At present, Line of Actual Control (LAC) is the line separating Indian areas of Ladakh from Aksai Chin. It is concurrent with the Chinese Aksai Chin claim line.

Border Negotiations

- Indian Prime Minister's visit to China in 2003 led to the agreement on appointing Special Representatives (SRs) and, in April 2005, there was agreement on the political parameters and principles that would underpin negotiations.
  - The aim was a comprehensive solution encompassing all three sectors. The agreed boundary would follow well-defined geographical features and respect the interests of the settled populations.
- During Indian Prime Minister's visit to China in May 2015, the proposal to clarify the LAC was rejected by the Chinese.
- However, in the Wuhan (2018) and Mahabalipuram (2019) summits, both China and India had reaffirmed that they will make efforts to "ensure peace and tranquility in the border areas".

Way Forward

- Detailed protocols are in place for troops to handle face-off incidents. The countries need to stick to the 2005 protocol and the 2013 Border Defence Cooperation Agreement.
- So far, there has been no major standoff between the two sides after the 73-day Doklam standoff on Sikkim-Bhutan border in 2017. Further, on 1st April, 2020 India and China completed their 70 years of diplomatic relations.
- Establishment of peace between the two big powers of such an important geopolitical region is essential

Conversion of Surplus Rice to Ethanol

Recently, the Central government allowed the conversion of surplus rice to ethanol. Ethanol produced will be used in making alcohol-based hand sanitizers and for blending in petrol.

Key Points

- This will lead to utilisation of part of a huge stockpile of 30.57 Million Tonnes (MT) of rice lying with the Food Corporation of India (FCI).
  - The stock is almost 128% more than the buffer stock and strategic requirement norms.

- The **National Policy on Biofuels, 2018** allows conversion of surplus quantities of food grains to ethanol when there is a projected oversupply of food grains, based on the approval of NBCC.

- Using surplus rice for ethanol will address the concern of about 750 million litres of grain-based distillery capacities lying idle, due to the lack of feedstock.
  - In India, the total capacity of grain-based distilleries is close to 2 billion litres, of which around 38% (750 million litres) is lying unused.

- Also, Ethanol is one of the most variable alternatives amongst biofuels.

National Policy on Biofuels 2018

Salient Features

- An indicative target of **20%** blending of ethanol in petrol and **5%** blending of biodiesel in diesel is proposed by 2030.

- Develop **National Biomass repository by conducting appraisal of biomass** across the Country.

- Categorization of Biofuels into **Basic Biofuels** - First generation (1G) Bioethanol and biodiesel and **"Adavanced Biofuels"** - Second Generation (2G) ethanol, drop-in fuels, **algae based** Third Generation (3G) Biofuels.

- Bio diesel production to be encouraged from non edible oilseeds, **used cooking oil**, short gestation crops and development of supply chain mechanisms.

- With a thrust on **Advanced Biofuels**, the Policy indicates a viability gap funding scheme for **2G ethanol Bio refineries** of ₹**5000 crore in 6 years** in addition to additional tax incentives, higher purchase price as compared to **1G biofuels**.

- Thrust on **reserach, development and demonstration** in the field of **Biofuel feedstock** production, advanced conversion technologies from identified feedstock.

- Increase scope of raw material for ethanol procurement by encouraging Intermediate **(B-Molasses)**, Sugarcane Juice, Other sugar containing materials and damaged as well as surplus food grains.

- Setting up of National **Biofuel coordination committee (NBCC)** under **Ministry of Petroleum and Natural Gas** and Working Group on Biofuels.

Biofuels

- Any hydrocarbon fuel that is **produced from an organic matter** (living or once living material) in a short period of time (days, weeks, or even months) is considered a biofuel.
- Biofuels may be solid, liquid or gaseous in nature.
  - **Solid:** Wood, dried plant material, and manure
  - **Liquid:** Bioethanol and Biodiesel
  - **Gaseous:** Biogas
- These can be used to replace or can be used in addition to diesel, petrol or other fossil fuels for transport, stationary, portable and other applications. Also, they can be used to generate heat and electricity.
- Some of the main reasons for shifting to biofuels include emission of the greenhouse gases from fossil fuels and the interest for obtaining fuel from agricultural crops for the benefit of farmers.
- The **National Policy on Biofuels 2018** aims to utilize, develop and promote domestic feedstock and its utilization for production of biofuels thereby increasingly substitute fossil fuels while contributing to national energy security, climate change mitigation, apart from creating new employment opportunities in a sustainable way.

History, Art & Culture

GI Tag Status to New Products

Recently, **Manipur's Chak-Hao, Gorakhpur (U.P) terracotta, Kashmir saffron**, Jharkhand's Sohrai Khovar painting and Telangana's Telia Rumal have bagged the Geographical Indication (GI) tag.

Key Points

■ **Chak-Hao:**
   ● Chak-Hao is a **scented glutinous (sticky) rice** which has been in cultivation **in Manipur** over centuries, and is characterised by its special aroma.
   ● The **rice is black in colour** and takes the longest cooking time of 40-45 minutes due to the presence of a **fibrous bran layer and higher crude fibre content.**
   ● It is normally eaten during community feasts and is served as **Chak-Hao kheer.**
   ● Chak-Hao has also been **used by traditional medical practitioners** as part of traditional medicine.

■ **Gorakhpur (Uttar Pradesh) terracotta:**
   ● The terracotta work of Gorakhpur is a centuries-old traditional art form.
   ● **Uniqueness:**
      ◆ The **entire work is done with bare hands.**
      ◆ The clay used in the terracotta products is **'Kabis' clay** which is found in the ponds of Aurangabad, Bharwalia and Budhadih village areas of Gorakhpur.
   ● The potters **do not use any colour,** they only dip the clay structure in a mixture of soda and mango tree barks, and bake it.
      ◆ The **red colour of terracotta does not fade** for years.
   ● **Products:**
      ◆ Major products of craftsmanship include the **Hauda elephants, Mahawatdar horse, deer, camel, five-faced Ganesha, single-faced Ganesha, elephant table, chandeliers, hanging bells etc.**

■ **Kashmir Saffron**
   ● It is cultivated and harvested in the **Karewa (highlands) of Jammu and Kashmir.**
   ● **Uniqueness:** The features which differentiates it from other saffron varieties available the world over are:
      ◆ It is the **only saffron that is grown at an altitude of 1,600 m to 1,800 m** above mean sea level.
      ◆ It has **longer** and **thicker stigmas, natural deep-red colour, high aroma, bitter flavour, chemical-free processing.**
      ◆ It also has a high quantity of **crocin** (colouring strength), **safranal** (flavour) and **picrocrocin** (bitterness).
   ● **Types:** There are **three types** of saffron available in Kashmir — **Lachha Saffron, Mongra Saffron and Guchhi Saffron.**
   ● **Uses:**
      ◆ Kashmir saffron is used globally as a **spice.** It also helps in revitalizing health.
      ◆ It is used in **cosmetics** and for **medicinal purposes.**
   ● **Benefit of tag:** With the GI tag, Kashmir saffron would **gain more prominence in the export market.**
      ◆ **Iran is the largest producer of saffron** and India is a close competitor.

■ **Sohrai Khovar Paintings:**
   ● The Sohrai Khovar painting is a **traditional and ritualistic mural art.**

a **Ceylonese student of his,** to pen and compose the **national anthem of Sri Lanka.**

Buddha Purnima

In 2020, Buddha Purnima was celebrated on 7th May.

Key Points

- The day falls on the **Poornima (full moon)** of the Hindu month **Vaishakha (April or May).**
- It marks the birth anniversary of **Gautam Buddha, founder of Buddhism.**

Gautam Buddha

- He was born as **Siddhartha Gautama in circa 563 BCE,** in a royal family in **Lumbini** which is situated near the Indo-Nepal border.
- His family belonged to the **Sakya clan** which ruled from Kapilvastu, Lumbini.
- At the age of 29, Gautama left home and rejected his life of riches and embraced a lifestyle of asceticism or extreme self-discipline.
- After 49 consecutive days of meditation, Gautam attained Bodhi (enlightenment) under a pipal tree at **Bodhgaya, Bihar.**
- Buddha gave his first sermon in the village of Sarnath, near Varanasi in Uttar Pradesh. This event is known as **Dharma Chakra Pravartana** (turning of the wheel of law).
- He died at the age of 80 in 483 BCE at **Kushinagara, Uttar Pradesh.** The event is known as **Mahaparinibban or Mahaparinirvana.**

Buddhism

- Buddha asked his followers to **avoid the two extremes** of indulgence in worldly pleasure and the practice of strict abstinence and asceticism.
- He ascribed instead the **'Madhyam Marg'** or the middle path which was to be followed.
- The main teachings of Buddhism are encapsulated in the basic concept of **four noble truths or ariya-sachchani and eightfold path or ashtangika marg.**
- **Four noble truths:**
  - **Suffering (dukkha)** is the essence of the world.
  - Every suffering has a cause – **Samudaya.**
  - Suffering could be extinguished – **Nirodha.**
  - It can be achieved by following the **Atthanga Magga (Eight Fold Path).**
- **Eight Fold Paths:** The path consists of various interconnected activities related to knowledge, conduct, and meditative practices. These are: Right view, Right intention, Right speech, Right action, Right livelihood, Right mindfulness, Right effort, Right concentration.
- **UNESCO's heritage sites related to Buddhism:**
  - Archaeological Site of Nalanda Mahavihara at Nalanda, Bihar
  - Buddhist Monuments at Sanchi, MP
  - Mahabodhi Temple Complex at Bodh Gaya, Bihar
  - Ajanta Caves Aurangabad, Maharashtra

Buddhist Councils

- Buddhist Councils marked important turning points in early Buddhism.
- These councils resulted in sectarian clashes and the eventual Great Schism that resulted in the **two major schools, Theravada and Mahayana.**
- In total, **4 major Buddhist councils** were convened:
  - **First Council**
    - It was held soon after the **Mahaparinirvan of the Buddha,** around 483 BC under the patronage of **King Ajatshatru** and was presided by **Mahakasyapa,** a monk.
    - The council was held in the Sattapani cave at **Rajgriha.**
    - The council was held with the purpose of preserving Buddha's teachings (Sutta) and rules for disciples. During this council, the **teachings of Buddha were divided into three Pitakas,** viz. Vinaya Pitaka, Sutta Pitakan and Abhidamma Pitaka.
  - **Second Council**
    - It was held in **Vaishali,** a village in Bihar under the patronage of the king **Kalasoka in 383 BC.** It was presided over by **Sabakami.**
  - **Third Council**
    - It was held in 250 BC in **Patliputra** under the patronage of **Ashoka** and was presided by **Moggaliputta Tissa.**
  - **Fourth Council**
    - It was held in 72 AD at **Kundalvan, Kashmir.** It was presided by **Vasumitra, while Asvaghosa** was his deputy under the patronage of **King Kanishka** of Kushan Empire.
    - Buddhism was divided into two sects namely **Mahayana and Hinayana.**

YOJANA

Benchmarking Healthcare System

The NITI Aayog has established the Health Index as an annual systematic tool to leverage cooperative and competitive federalism to accelerate the pace of achieving health outcomes and encourage cross-learning among states. NITI Aayog releases it along with the Ministry of Health and Family Welfare (MoHFW) and the World Bank.

Health Index

- It is the first ever systematic exercise for tracking the progress on health outcomes and health systems' performance across all the States and Union Territories (UTs) in India on an annual basis.
- It is a weighted-composite Index based on select indicators in three domains:
  - Health Outcomes;
  - Governance and Information; and
  - Key Inputs and Processes.
- The vision behind establishing the annual systematic tool is to propel States towards undertaking multi-pronged interventions and drive efforts towards achievement of SDG Goal 3 (Good Health and Well-being).
- An analysis of this can help States in focusing attention on better targeting of interventions and improving the delivery of health services and also an opportunity of sharing best practices.
- The Index is an innovative tool as it not only fosters competition among states by comparing similar states to each other but also nudges them to better their own performance in the previous year.
- The gap between the best performing states and the least performing states is very wide:
  - Kerala and Uttar Pradesh are separated by around 45 points, Mizoram and Nagaland by around 36 points, and Chandigarh and Daman and Diu by around 22 points as indicated by the Overall Performance Scores for 2017-18 (Health Index, 2019).

- The States are grouped into three categories: **Aspirants, Achievers,** and **Front-runners**.
  - Andhra Pradesh had the highest proportion of indicators (63%) among the larger States which fell in the category of most improved or improved.

Room for improvement

- It is envisaged that tracking progress on incremental performance will also help shake complacency among "Healthiest Large States" such as Kerala, Punjab, and Tamil Nadu that have historically done well.
- The Health Index has the potential to be a game-changer as it can shift the focus from budget spends, inputs and outputs to outcomes by shining the light on States that have shown most improvement.
- The need of the hour is to make outcome data available for smaller States and UTs more frequent and updated outcomes for non-communicable diseases,
- Financial protection, and other priority areas, and the robust programmatic data that can be used for continuous monitoring.

Conclusion

The Health Index is an important instrument in understanding the variations and complexity of the nation's performance in health. However, there are limitations to the Index as no single index can purport to comprehensively capture the complex story of the evolution of the health system.

Strengthening Health Systems

India has largely achieved Millennium Development Goals (MDGs) and is committed to Universal Health Coverage (UHC) which is one of the targets of Sustainable Development Goals (SDG) by 2030. The SDG 3 targets to achieve UHC, including financial risk protection, access to quality essential health care services, and access to safe, effective, quality and affordable essential medicines and vaccines for all.

ACADEMIC VITAMINS

KURUKSHETRA

Women, Agriculture and Rural Prosperity

There has been an increasing trend in the role played by women in agricultural activities in rural areas. Women have been instrumental in agricultural development and rural prosperity.

Key points

- Agriculture in India, contributing about 15.5% of GDP, is a female intensive activity.
- The Agriculture Census, 2015–16 has revealed a very promising trend.
  - The census established that the share of **female operational holders** has increased from 12.79% in 2010-11 to 13.87% in 2015-16.
  - In terms of the **operated area**, the share of women increased from 10.36% to 11.57%.
- This signifies that more and **more females are participating** in the management and operation of agricultural lands.

Agriculture and female employment

- The central role in all operations of agriculture and even rural household management is played by women.
- They are involved in all aspects of agriculture, from crop and seed selection to harvest and post-harvest management, marketing, and processing.
- According to estimates, **the agricultural sector employs about 4/5ᵗʰ of all economically active women**.
- Women have a clear edge in dairying and animal husbandry also.
- Rural women play a vital role not only in crop planning and cultivation but also in high-value activities like horticulture, primary food processing, livestock rearing, fisheries and cottage industries.

Financial inclusion and rural women

- NABARD's **All India Rural Financial Inclusion Survey, 2016–17** indicated that the structure of rural income has been changing rapidly.

- Agriculture which happened to be a major source of income for the rural households a few years earlier has been transformed and the wages including labour wages have taken a front seat both in Agri and non-Agri households in terms of earnings to households.
- However, agriculture is still an engine of growth and poverty reduction in rural areas being the main occupation for the poor.
- According to NABARD's estimates, close to 60% of women members participating in the survey were attending domestic duties and not engaged in any economic activity.
- It is evident that rapid urbanisation in India is yet to become inclusive to encourage women to join the labour force.

Challenges

- Agri-census 2015 data shows that 12 states account for about 92% of the number of women farmers and areas operated by them showing a countrywide disparity.
  - The average landholdings with women farmers are 0.9 ha while the highest is of 2.84 ha in Nagaland.
- Women have very limited access to productive resources which consequently limits their productivity.
- The jobs in rural areas have been decreasing and not enough rural women have been able to make the transition to working in urban areas.

Way forward

- **Mobilizing rural women:** Till date 64.39 lakh, SHGs with 7.05 crore members have been **established and revived under NRLM**. The movement needs to be continued along with more and more employment to women workers under another flagship rural employment programme **MGNREGA and others**.
- **Role of financial institutions:** They need to play a proactive role in last-mile accessibility of credit to the

DOWN TO EARTH

GIST OF MAJOR ARTICLES FROM 30 APRIL AND 15 MAY ISSUES

World After Coronavirus

The current global scenario due to COVID-19 has brought four possible futures to the world: a descent into barbarism, a robust state capitalism, a radical state socialism, and a transformation into a big society built on mutual aid.

Barbarism

- Barbarism will be the future if we continue to rely on exchange value as our guiding principle and yet refuse to extend support to those who get locked out of markets by illness or unemployment.
- Businesses fail and workers starve because there are no mechanisms in place to protect them from the harsh realities of the market.
- The subsequent failure of the economy and society would trigger political and social unrest, leading to a failed state and the collapse of both state and community welfare systems.

State capitalism

- It is a form of capitalism in which the Central government controls most of the capital, industry, natural resources, etc.
- It is the dominant response we are seeing across the world right now. Typical examples are the UK, Spain and Denmark.
- The state capitalist society continues to pursue exchange value as the guiding light of the economy. But it recognises that markets in crisis require support from the state.
- It also enacts a massive Keynesian stimulus by extending credit and making direct payments to businesses.
- Increased illness and death will provoke unrest and deepen economic impacts, forcing the state to take more and more radical actions to try to maintain market functioning.

State socialism

- State socialism describes the future with a cultural shift that places a different kind of value at the heart of the economy.
- The key here is that measures like nationalisation of hospitals and payments to workers are seen not as tools to protect markets, but a way to protect life itself.
- Citizens no longer rely on employers as intermediaries between them and the basic materials of life. Payments are made to everyone directly and are not related to the exchange value they create.
- There are risks to this approach-we must be careful to avoid authoritarianism. But done well, this may be our best hope against an extreme COVID-19 outbreak.

Mutual aid

- In this future we will adopt the protection of life as the guiding principle of our economy. But, in this scenario, the state does not take a defining role. Rather, individuals and small groups begin to organise support and care within their communities.
- The risks with this future is that small groups are unable to rapidly mobilise the kind of resources needed to effectively increase healthcare capacity, for instance.
- But mutual aid could enable more effective transmission prevention, by building community support networks that protect the vulnerable and police isolation rules.

Conclusion

Social change can come from many places and with many influences. A key task for us all is demanding that emerging social forms come from an ethic that values care, life, and democracy. The Central political task in this time of crisis is living and (virtually) organising around those values.

Micro Small Medium Enterprises

Why in news?

Recently, the Government revised the criteria to classify Micro Small and Medium Enterprises.

What are MSMEs?

- The Micro- Small and Medium Enterprises (MSMEs) are small-sized entities, defined in terms of the size of the investment.
- Though the primary responsibility of promotion and development of MSMEs is of the State Governments, the Union government has passed an Act in 2006 to empower the sector and also has formed a Ministry (Ministry of MSMEs).
- Micro, Small & Medium Enterprises in accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 are classified into **two classes**:
  - **Manufacturing Enterprises:** The Manufacturing Enterprise is defined in terms of investment in Plant & Machinery.
  - **Service Enterprises:** The enterprises engaged in providing or rendering of services and are defined in terms of investment in equipment.
- **Classification of MSMEs:**
  - **Micro:** Any firm with investment up to ₹1 crore and turnover under ₹5 crore.
  - **Small:** A company with investment up to ₹10 crore and turnover up to ₹50 crore.
  - **Medium:** A firm with investment up to ₹20 crore and turnover under ₹100 crore.
- The state of Uttar Pradesh has the largest number of estimated **MSMEs** with a share of 14.20% of the total **MSMEs** in the country.

Importance of MSMEs

- **Economic development:** MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the economic development of the country.
- **Employment opportunities:** MSMEs play a crucial role in providing large employment opportunities at comparatively lower capital cost.
- **Boost indigenisation:** Industries like Food Processing, Pharmaceutical, Textile & Garments, Retail, IT and ITES, Agro and Service sector help to enhance the make in India products and boost the export.

Challenges faced by MSMEs

- **Financial constraints:** Due to lack of adequate and timely access to finance the sector is not able to invest in its manufacturing, purchase raw materials timely, access new technologies or acquire new skills.
- **Inadequate marketing:** These units often do not possess any marketing organization. As a result, their products compare unfavorably with the quality of the products of the large-scale industries.
- **Regulatory policies:** Indian MSMEs are weighed down by inflexible and complicated regulatory policies like taxation, construction permits, registering property, enforcing contracts, resolving insolvency, etc.

Measures taken by Government

- E-commerce portal 'Bharat Craft' to act as a direct interface between sellers and buyers.
- Make in India and budgetary allocation for funding MSMEs through SIDBI and other funds helped many MSME units to have timely access to finance and investments.
- National Small Industries Corporation Limited (NSIC) promotes, aids and fosters the growth of MSMEs, generally on a commercial basis.
- Micro Small and Medium Enterprises Development (MSMED) Act, 2006, seeks to facilitate the development of these enterprises.

Way forward

- Changing labour laws could be fruitful for small entrepreneurs.
- Ease in financing can provide timely access to finance for these industries. Like SIDBI's credit guarantee scheme provides financial stability to these industries.
- Micro enterprises act as a starting stage of entrepreneurship that requires low investment in technology, units graduating to small and medium enterprises have to enhance their technical capacity and explore newer markets in order to stay competitive for sustainable growth.
- The Common Facility Centers like design, studio, testing centres should continuously engage in research and innovation and sensitize the local units in packing and branding regard.

TARGET MAINS

PAPER-I

Question 1. *The Jallianwala Bagh Massacre shook the verve and vitality of the Indian freedom struggle. Enumerating the events that followed it, discuss the role of this incident in changing the attitude of the masses towards British rule.*

Answer: The Jallianwala Bagh Massacre, also called Massacre of Amritsar was an incident on April 13, 1919, in which British troops fired on a large crowd of unarmed Indians in an open space known as the Jallianwala Bagh in Amritsar in Punjab.

Events that followed the massacre:

- The shooting was followed by the proclamation of martial law in the Punjab that included public floggings and other humiliations.
- Indian outrage grew as news of the shooting and subsequent British actions spread throughout the subcontinent.
- The Bengali poet and Nobel laureate Rabindranath Tagore renounced the knighthood that he had received in 1915.
- Gandhiji began organizing his first large-scale and sustained non-violent protest (*satyagraha*) campaign, the noncooperation movement (1920–22).
- Newspapers across the world condemned the act, which pressurised the British government to conduct an inquiry against General Dyer (the **Hunter Commission**).
- As a consequence of the event and the resulting reactions across the country, the Government repealed the Rowlatt Act, the Press Act, and 22 other laws in March 1922.

Significance of this event in changing the attitude of the masses towards British rule.

- It was an act so monstrous and shocking that it sowed the seed for the end of British rule in India, reviving a greater sense of nationalism and demand for independence among the citizens of India.

- The massacre shocked the conscience of many Indians who believed in the British idea of rule of law and rule towards self-rule or Swaraj.
- Many stalwarts of the Indian freedom struggle were lawyers trained in Britain; British imposition of a draconian law and the appalling cruelty of the massacre were enough for them to discard their illusions about the British tradition of fair play.

It marked a turning point in India's modern history, in that it left a permanent scar on Indo-British relations as the people began to wilfully break the laws made by the state, the state itself became illegitimate.

Question 2. *The current pandemic has its most visible impact in terms of suffering of migrant workers. In this context, explain the concept of reverse migration and discuss the reasons behind it.*

Answer: The recent outbreak forced many workers to move back to their hometown due to the work crisis and food crisis. This migration is showing a reverse trend from urban area to rural area which was earlier pronounced as urban to rural migration for better employment and life which is termed as reverse migration.

Reasons of reverse migration

1. **Job loss:** This outbreak forced many factories and industries to shut down due to complete trade off. Many migrant workers who are dependent only on wages lost their jobs which made them move back where they might earn from their land.

2. **Fear of family loss:** COVID-19 is the most lethal outbreak in history. Due to this migrants are facing fear of losing their family members and in the ray of hope meeting last time they are forced to go back to their home.

3. **Quarantine and isolation pressure:** It has been seen that isolation facilities are becoming a burden on the state's exchequer. So this huge population of migrants are becoming pressure on states to provide public health and reduce COVID-19 cases.

ART AND CULTURE

- Two important changes employed by builders were the adoption of stone as a primary raw material for major buildings and the heavy usage of wood to build houses and palaces.
- Economically, the architecture of the period can be differentiated as either with or without royal patronage. For example, royal patronage was extended to palaces, pillars and stupas but was not extended to the rock-cut caves and ordinary homes.

Important styles of architecture

- The Mauryan capital, Pataliputra, had a **palace** built of polished wood as had been noted by Megasthenes.
  - Another palace at **Kumrahar** was mentioned by Megasthenes in his book **Indika** as more splendid than the palaces of Iran.
- **Mauryan pillars** built of mostly sandstone were used as symbols of the bearing state, of victories in war and as communication tools for sermons of the emperor addressed to the public.
  - They are composed of four segments – a base in the form of the long shaft (often a monolith), on it a Capital (usually bell-shaped and inspired from Iran), above it the abacus (either circular or rectangular) and finally on top the figurines of animals.
  - For example, Bull Capital at Rampurva, Lion pillar at Vaishali and the Allahabad pillar **without a capital**.
  - An elephant capital was found at Sankisa (UP) which symbolises the birth of Buddha.
- **Mauryan stupas** are burial mounds. Originally, burial mounds were used in the Vedic age but it gained popularity only after Buddhists started using the practice.
  - After Buddha's death, nine such stupas were erected (Vaishali, Kapilavastu, Rajagriha, Kushinagar, Pava, Ramagrama, Pippalivana, Allakappa and Vethapida) where the first eight contained the relics of Buddha and the last one contained the pot, which was used to keep Buddha's relics.
  - A stupa is made using unburnt brick inside and burnt bricks outside. The surface is covered with plaster.
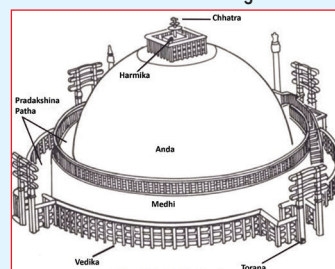 - The important architectural parts of a stupa are - *chatras* (cone at the top), *toran* (gateway), *medhi* (circular terrace), *vedikas* (stone railings), *sopanas* (staircases) and *pradakshina patha* (passageway around the stupa).

Stupa

- Stupa, Buddhist commemorative monument, usually houses sacred relics associated with the Buddha or other saintly persons.
- Tradition has it that after the great demise of Lord Buddha, Emperor Ashoka decided to construct a large number of stupas throughout his dominion in memory of the Master and enshrine in them relics such as pieces of bones, teeth, hair etc., over which the Stupas were constructed.
- Stupas are classified into three types:
  - **Sarika Stupa** - raised over body relics.
  - **Paribhojika Stupa** - raised over the articles, like the bowl, the sanghati, etc.
  - **Uddeshika Stupa** - built as commemorative monuments.
- The Indian conception of the stupa spread throughout the Buddhist world and evolved into such different-looking monuments as the bell-shaped *dagaba* ("heart of *garbha*") of Ceylon (Sri Lanka), the terraced temple of Borobudur in Java, the variations in Tibet, and the multistoried pagodas of China, Korea, and Japan.
- **Sanchi stupa**, in Madhya Pradesh, built by Ashoka is the most famous and one of the oldest stupas. **Amaravati stupa**, in Andhra Pradesh, is the most famous stupa of South India.
- **Sanchi stupa**, in Madhya Pradesh, built by Ashoka is the most famous and one of the oldest stupas. **Amaravati stupa**, in Andhra Pradesh, is the most famous stupa of South India.

Features of Stupa

- Stupas are usually built on a foundation laid with blocks of stones or bricks. On this foundation, a hemispherical dome (**Anda**) was raised.
- On the truncated top of the hemisphere, a **Harmika** is placed, surrounded by a railing.
- The stupa is enclosed by a **Vedika**. At Bharhut, Sanchi and Amaravati the Vedika consists of upright pillars with three transverse bars known as the suchi.
- **Toranas** were ceremonial gateways around the stupas.
- **Medhi** was a pedestrian path for devotees to wave in homage to the Stupa. **Medhi** was approached by double staircase Sopana.
- A path of circumambulation (**Pradakshinapath**) runs around the stupa at the ground at a level within the railing.

- **Natya** highlights the dramatic element and most dance forms do not give emphasis to this aspect today with the exception of dance-drama forms like Kathakali.
- **Nritya** is essentially expressional, performed specifically to convey the meaning of a theme or idea.
- **Nritta** on the other hand, is pure dance where body movements do not express any mood (bhava), nor do they convey any meaning.

Classical Dances

Bharatnatyam (Tamil Nadu)

- The word Bharatnatyam is an amalgamation of three words- Bhava (Expression), Raga (Melody) and Tala (Rhythm). It is the most ancient dance form of India. It is mentioned in Silappadikaram and Bharat Muni's Natya shastra.
- The **Abhinaya Darpana** by **Nandikesvara** is one of the main sources of textual material for the study of the technique and grammar of body movement in Bharatnatyam Dance.
- It is a highly stylized solo feminine dance which evolved from the Devadasi System of South Indian Temples.
- Bharatnatyam dance is known to be **ekaharya**, where one dancer takes on many roles in a single performance.
- In the early 19th century, the famous Tanjore Quartette, under the patronage of Raja Serfoji are said to have been responsible for the repertoire of Bharatanatyam dance as we see it today.
- The music accompanying the dance is Carnatic (Karnataka) style along with instruments like- mridangam, flute, cymbals, veena and violin.
- Late Rukmini Devi gave a new life and popularity to this dance. On par with her was T. Bala Saraswati, the **queen of Bharatanatyam**. Other exponents include Sonal Mansingh, Leela Samson, Shanta Rao, Yamani Krishanamurthy etc.

Kathakali (Kerala)

- Kathakali derives its textual sanction from **Balarama Bharatam** and **Hastha Lakshana Deepika**.
- It originated from the Theyyam, a ritual tribal dance of north Kerala and Kalaripayattu. It is known as the 'Ballet of the East'.

- Kathakali is combination of two words i.e. Katha (Story) and Kali (Performance). Kathakali is traditionally performed by boys and men, even for female roles.
- The theme of Kathakali is mainly based on Hinduism and is a highly charged powerful dance that combines devotion, drama, music, costumes and make-up to produce one of the world's most impressive forms of sacred theatre.
- The costumes and makeup are especially elaborate, with faces made to look like painted masks and enormous head-dresses.
- It requires control of body and emotion. '**Mudras**' follows the song sung backstage. Use of 'eyes' and 'eyebrows' is of utmost importance.
- Vallathol Narayan Menon was the fountainhead of inspiration who created an institute called 'Kalamandalam'. Other exponents associated with Kathakali are Kunju Kurup, Kalamandalam Krishnan, Shata Rao, Guru Gopinath etc.
- **Chakiarkoothu, Koodiyattam**, **Krishnattam** and **Ramanattam** are few of the ritual performing arts of Kerala which have had a direct influence on Kathakali in its form and technique.

Kuchipudi (Andhra Pradesh)

- Its name has its origin in a place called Kuchipudi village in Krishna district of Andhra Pradesh where it was initially performed.
- Andhra has a very long tradition of dance-drama which was known under the generic name of **Yakshagana**.
- In the 17th century Kuchipudi style of Yakshagana was conceived by **Siddhendra Yogi**, a Vaishnava poet.
- Traditionally the dance was performed by men, even the female roles, although now it is predominantly performed by women. Except its emphasis on animation, in all other aspects it is similar to Bharatnatyam.
- The contribution of Lakshmi Narayan Shastri is greatest. Other exponents of this dance are Raja and Radha Reddy, G. Sarala, Swapana Sundari, Sudha Sekhar, etc.

Odissi (Odisha)

- The **Natya Shastra** mentions many regional varieties, such as the south-eastern style known as the **Odhra**

the patronage of King Manavada of Calicut. Krishnattam is a cycle of eight plays performed for eight consecutive days.

- **Mudiyettu**: The traditional folk theatre form of **Kerala** is celebrated in the month of Vrischikam (November-December). It is usually performed only in the Kali temples of Kerala, as an oblation to the Goddess. It depicts the triumph of goddess Bhadrakali over the asura Darika.

- **Koodiyattam**: It is one of the oldest traditional theatre forms of **Kerala**, and is based on Sanskrit theatre traditions. The characters of this theatre form are: Chakyaar or actor, Naambiyaar, the instrumentalists and Naan Yaar, those taking on women's roles.

- **Yakshagaana**: The traditional theatre form of **Karnataka**, is based on mythological stories and Puranas. The most popular episodes are from the Mahabharata.

- **Therukoothu**: The most popular form of folk drama of **Tamil Nadu**, literally means "street play". It is mostly performed at the time of annual temple festivals of Mariamman (Rain goddess) to achieve rich harvest.

PUPPETRY

Key Points

- The earliest instances of puppetry in India can be found in the ruins of the Indus Valley Civilization where puppets with holes to attach strings in them were found.

- In addition, the Tamil literature Silappadikaaram which was composed around the 2nd century BC also mentions puppetry.

- In the mythological Bhagwata, three terms are mentioned to describe the strings God uses to control the universe – **Satta, Raja and Tama** – which are puppetry terms. Therefore, it can be seen that puppetry has both historical and cultural significance when it comes to India.

- Puppets in India can be classified into four types:
  - String Puppets
  - Shadow Puppets
  - Rod Puppets
  - Glove Puppets

String Puppets

- **Kathputli, Rajasthan**
  - The traditional marionettes of Rajasthan are known as Kathputli. Carved from a single piece of wood, these puppets are like large dolls that are colourfully dressed.
  - These puppets wear long trailing skirts and do not have legs. Puppeteers manipulate them with two to five strings which are normally tied to their fingers and not to a prop or support.

- **Kundhei, Orissa**
  - Made of light wood, the Orissa puppets have no legs but wear long flowing skirts.
  - The puppeteers often hold a wooden prop, triangular in shape, to which strings are attached for manipulation.

- **Gombeyaata, Karnataka**
  - They are styled and designed like the characters of Yakshagana, the traditional theatre form of the region.
  - The Gombeyatta puppet figures are highly stylized and have joints at the legs, shoulders, elbows, hips and knees. These puppets are manipulated by five to seven strings tied to a prop.

- **Bommalattam, Tamil Nadu**
  - Puppets from Tamil Nadu, known as Bommalattam combine the techniques of both rod and string puppets.
  - Bommalattam theatre has elaborate preliminaries which are divided into four parts - **Vinayak Puja, Komali, Amanattam and Pusenkanattam.**

Shadow Puppets

- **Togalu Gombeyatta, Karnataka**
  - These puppets are mostly small in size.
  - The puppets, however, differ in size according to their social status, for instance, large size for kings and religious characters and smaller size for common people or servants.

- **Tholu Bommalata, Andhra Pradesh**
  - The puppets are large in size and have jointed waist, shoulders, elbows and knees. They are coloured on both sides.

Samkhya School (also Sankhya)

- Founded by Kapil Muni (wrote the **Samkhya sutra**), this is the oldest school of philosophy.
- Samkhya literally stands for counting and so it can be called the rational school of philosophy. This school separates the soul and matter as different entities, therefore, earned the name 'dvaita vada' (dualism).
- Here knowledge can be earned through the methods of **Pratyaksha** (perception), **Anumana** (inference) and **Shabda** (hearing). Originally this school believed that divine agency was not a requirement for the creation of the universe arguing that the world came into existence due to **Prakriti** (nature).
- This original view was the scientific view and it can be dated from the 1st century AD. Later on, the views of the school changed wherein they argued that for the creation of the universe both *Prakriti* and *Purusha* (human) were necessary. This later view was a spiritual view of the creation of the universe. This change occurred around the 4th century AD.
- In fact, Samkhya school explained the phenomena of the doctrine of evolution and answered all the questions aroused by the thinkers of those days.

Yoga School

- The origin of this school can be attributed to the **work of Patanjali called Yogasutra**.
- This school argued that by combining meditation and physical yogic techniques one could achieve salvation. The goal was to **release *Purusha* from *Prakriti***.
- Eight limbs of yoga are: *asanas* (physical postures), *pranayamas* (breathing exercises), *yama* (self-control), *niyama* (observation of rules), *pratyahara* (choice over objects), *dharna* (fixation over a chosen object), *dhyana* (concentration on the chosen object) and *samadhi* (merging of the mind and the object).
- The Yoga school taught the individual to move away from worldly attachments in order to achieve salvation through mukti.
- Yoga admits the existence of God as a teacher and guide.

Nyaya School

- This school is thought to be founded by Gautama, the author of Nyaya Sutra.
- The school believed in using logical thinking to achieve salvation. To do this 'real knowledge' had to be acquired through analysis using tools such as inference, analogy and listening.
- The constant theme of the school was the application of reasoning and thinking to achieve salvation.
- The Nyaya system of philosophy considers God who creates, sustains and destroys the universe.

Vaisheshika School

- The origin of this school is attributed to **Kanada** who wrote the source text that governs this philosophy.
- The Vaisheshika School believed that the universe was created using the five core elements (Dravya) of - fire, air, water, earth and ether (sky). Therefore, this school believed in the physicality and reality of the universe.
- Due to their scientific approach towards the understanding of the universe, they could develop the **theory of atoms**. They also heralded the **study of physics** in India
- Some other metaphysical beliefs found in this school are the belief in god, laws of karma, heaven and hell and salvation. These metaphysical beliefs did not hamper their scientific pursuit of knowledge but rather supplemented it.
- The living beings were rewarded or punished according to the law of karma, based on actions of merit and demerit.

Mimamsa School

- The names associated with this philosophy are **Sabar Swami** and **Kumarila Bhatta**.
- The Sutras of **Jaimini** composed in the 3rd century BC are the main texts of this school.
- This is the school of philosophy that paid primary focus on the rituals of the Vedas. Literally, the word 'Mimamsa' stands for reasoning and interpretation.
- After reasoning and interpreting the Vedas, the rituals had to be applied. Only by performing the Vedic rituals salvation could be earned and so they did not question the validity of the knowledge contained in the Vedas.
- Indirectly this helped legitimize the social segregation among people, as the teachings of this school of philosophy were ultimately used to further the concept of Brahminical superiority in society.

Important Tamil Works	
Kural	By Tamil saint Thiruvalluvar, which discusses polity-governance and love.
Silappadhikaram	Republished as 'Tale of an Anklet', it was written by Ilango-Adigal.
Manimekalai	Story of Manimekalai by Chattanar

Malayalam Literature

- Malayalam language is spoken in Kerala and its adjoining areas. The oldest written record of Malayalam literature is the **Vazhappally** inscription.
- In ancient periods, classical songs known as Pattu were a blend of Tamil and Malayalam languages. Pattu, such as, Ram Charitam was composed by **Chiramon**.
- Malayalam was greatly influenced by Sanskrit language and it led to the evolution of a new dialect known as Manipravalam, which is a blend of these languages.
- **Thunchath Ezhuthachchan**, considered as the **'Father of Malayalam Literature'** composed several classics of Malayalam literature like the Adhyathmaramayanam, Bhagavatham, Ramayanam, etc.

Telugu Literature

- Prior to Nannaya(considered as the first poet in Telugu), Telugu literature existed only in the form of inscriptions.
- Most of the works of this literature began with the translation from Sanskrit. **Nannaya, Tikanna** and **Errana** are known as the Kavi Trayam, the trinity of poets. These poets translated the Mahabharata from Sanskrit into Telugu over the period of 11th - 14th century AD.
- One of the important and successful works titled **Uttaraharivamsam** was composed by the poet **Nachana Somanatha**.
- Telugu literature reached its zenith during the Vijayanagara period. King Krishandevaraya composed a poem titled Amukta Malyada. The five important works in Telugu language are known as **Pancha Kavyas**.

Pancha Kavyas of Telugu Literature	
Poet	**Work**
Allasani Peddana	Manu Charithra
Tenali Ramakrishna	Panduranga Mahatyam
Sri Krishnadevaraya	Amuktamalyada
Rama Raja Bhusan (**Bhattu Murti**)	Vasu Charitra
Chemakura Venkata Kavi	Vijaya Vilaasamu

Major Sanskrit Books and Dramas	
Charak Samhita	Book on medicine by Charak
Sushruta Samhita	Book on surgery by Sushruta
Pancha-Siddhantika	Book on astrology by Varamihira
Aryabhatiya	Book on astronomy and mathematics by Aryabhatta
Madhava Nidana	Book on pathology by Madhava
Abhijnana Shakuntalam and Malavikagnimitra	Dramas by Kalidasa based on the recognition of Shakuntala and love story of Malavika and Agnimitra respectively
Mricchakatika	Drama by Sudraka based on the love affair of Charudatta with a courtesan
Mudra Rakshasa	Drama by Vishakhdutta based on the life of Chandragupta Maurya
Uttara Ramacharitam	Drama by Bhavabhuti based on the later life of Rama
Swapnavasavadatta	Drama by Bhasa based on the theme dreams of Vasavadatta
Arthashastra	Book about statecraft from the Mauryan period by Kautilya
Buddhacharita	Book on the life of Buddha by Ashvagosha
Rajatarangini	Book which gives a detailed account of the kings of Kashmir by Kalhana
Katha-sarit-sagar	Poetic work by Somadeva

Kannada Literature

- The early scholars and writers of Kannada literature were the Jains and Lingayats.
- Madhava wrote **Dharmanathapurana** based on the life of 15th Jain Tirthankara. In the later times, Vaishanava writers dominated Kannada literature.
- Three poets, **Pampa, Ponna and Ranna** were known as the **'ratnatraya' or 'the three gems' of Kannada literature**.
- Pampa (known as Father of Kannada), attached to the court of Chalukya Arikesari, wrote two important poetic works, Adi Purana and Vikramarjiva Vijaya.

Jarawa

- The Jarawa is an adivasi indigenous group belonging to the Andaman Islands. Jarawas speak the Jarawa language which is an Ongan language.

- They live in parts of South Andaman and Middle Andaman Islands, and their present numbers are estimated at between 250–400 individuals.

Festivals of India

List of Indian Festivals		
State	**Festival**	**Description**
Assam	Bihu (Bohaag, Magh and Kaati Bihu)	These are seasonal festivals held to celebrate the agricultural calendar viz. sowing (Bohaag), transplanting (Kaati) and harvesting (Magh).
Arunachal Pradesh	Torgya Monastery Festival	It is a monastic festival held to celebrate the destruction of the evil spirits and harmful forces.
Meghalaya	Behdienkhlam Festival	It is an important festival of the Jaintias held to seek good health, prosperity and a good harvest. Literally it means 'to drive away evils and plague'.
Manipur	Ningol Chakouba	Literally meaning to invite a married daughter for lunch at her mother's home, it is a festival that celebrates the special homecoming with a feast of various delicacies.
Mizoram	Chapchar Kut	It is a spring festival celebrated in Mizoram to mark the successful clearing of the jungles in preparation for the Jhum cultivation.
Nagaland	Hornbill Festival	This festival is the celebration of the Naga cultural heritage where the various Naga tribes showcase their traditions under one roof.
Tripura	Kharchi Puja	In Tripuri language, it literally means to cleanse the land and the people of all sins. It involves the worship of the Fourteen Gods which is the dynastic deity of the Tripuri people.
Assam	Ambubachi Mela	Held in the Kamakhya Temple, in Assam, it is also called the 'Mahakumbh of the East'. It is also the biggest festival in India associated with the cult of fertility worship.
Ladakh	Losar festival	The festival is marked by making offerings to the Gods, both in Gompas and their shrines. It has its origin in the 15th century, celebrates the Ladakhi or Tibetan New Year.
Kerala	Onam	It is a harvest festival, and falls in the Malayalam calendar month of *Chingam*, which overlaps with August–September. The festival is celebrated to commemorate King Mahabali.
Kerala	Thrissur Pooram	It is held at the **Vadakkunnathan Temple** in Thrissur annually on the Pooram day – the day when the moon rises with the Pooram star in the Malayalam Calendar month of Medam.
Tamil Nadu	Pongal	It is a harvest festival of South India, particularly in the Tamil community. It is observed at the start of the month *Tai* according to Tamil solar calendar, and this is typically about January 14.
Telangana and Andhra Pradesh	Bathukamma	It is a floral festival celebrated as per Satavahana calendar for nine days starting Bhadrapada Pournami usually in September–October. Bathukamma is a beautiful flower stack, arranged with different unique seasonal flowers, most of them with medicinal values.
Jharkhand	Karma festival	**Karma** is a harvest festival dedicated to the worship of Karam-Devta (Karam-Lord/God), the god of power, youth, and youthfulness.
Lohri	Punjab	It is celebrated on 13th January every year. It marks the ending of winters as the Sun moves from Winter Solstice to Equinox.

List of Tribal Festivals			
Festival	**Region**	**Festival**	**Region**
Kail Poldhu festival, Kodava Tribe	Coorg, Karnataka	Mopin festival, Galo Tribe	Arunachal Pradesh
Sarhul festival	Jharkhand	Tusu festival, Kurmi Tribe	Jharkhand, West Bengal
Thisam Phanit, Naga Tribe	Manipur	Bhagoria haat festival, Bhil Tribe	Madhya Pradesh
Bhoramdeo Mahotsav	Chhattisgarh	Chavang Kut, Kuki-Chin-Mizo Tribe	Manipur
Boori Boot, Nyishi Tribe	Arunachal Pradesh	Nongkrem Dance festival, Khasi Tribe	Meghalaya
Baneshwar festival, Bhil Tribe	Rajasthan	Moatsu festival, Ao Tribe	Nagaland
Dree festival, Apatani Tribe	Arunachal Pradesh		

Practice Questions (Art and Culture)

1. Which of the following showed the greatest uniformity in Harappan settlements?
   (a) Town planning
   (b) Building
   (c) Bricks
   (d) Religious practices

2. Which metal has so far not been discovered in Harappan sites?
   (a) Copper   (b) Gold
   (c) Silver   (d) Iron

3. Consider the following statements regarding the Indus Valley Civilisation:
   1. It was predominantly a secular civilisation and the religious element, though present, did not dominate the scene.
   2. During this period cotton was used for manufacturing textiles in India.

   Which of the statement(s) given above is/are correct?
   (a) Only 1   (b) Only 2
   (c) Both 1 and 2   (d) Neither 1 nor 2

4. Which one of the following is not the characteristic feature of the Harappan settlements?
   (a) Doorways and windows generally faced the side lanes and rarely opened into the main streets
   (b) Houses generally had separate bathing areas and toilets
   (c) The citadel was walled but the lower towns were not walled
   (d) Drains and water chutes from the second storey were often built inside the wall

5. Which of the following statement(s) is/are correct about seals found in Harappa civilization?
   1. Seals were primarily made of silver and gold.
   2. Un-inscribed seals were found at Rakhigarhi.
   3. Seals were only used for trade and commerce.

   Select the correct answer from the code given below:
   (a) 1 and 2 only   (b) 2 only
   (c) 2 and 3 only   (d) 1, 2 and 3

6. The script of the Indus Valley Civilisation was:
   (a) Boustrophedon
   (b) Brahmi
   (c) Nagri
   (d) None of these

7. Consider the following pairs:

River	Place
A. Ghaggar	1. Mohenjodaro
B. Ravi	2. Kalibangan
C. Indus	3. Lothal
D. Bhogava	4. Harappa

   Select the answer from the codes given below:

	A	B	C	D
(a)	1	2	3	4
(b)	3	4	1	2
(c)	3	1	4	2
(c)	2	4	1	3

8. Which one of the following statements regarding Harappan Civilisation is correct?
   (a) The Harappan script was first deciphered by James Prinsep.
   (b) The inhabitants of Harappa had neither knowledge of copper nor of bronze.
   (c) The Harappan Civilisation was rural-based.
   (d) The inhabitants of Harappa grew and used cotton.

9. Which one of the following sites of the Indus Valley Civilisation had an ancient dockyard?
   (a) Kalibangan
   (b) Lothal
   (c) Rangpur
   (d) Harappa

10. The site of Harappa is located on the bank of the river:
    (a) Saraswati   (b) Indus
    (c) Beas   (d) Ravi

11. Which of the following was conspicuous by its absence in the terracottas of Indus Civilisation?
    (a) Sheep   (b) Buffalo
    (c) Cow   (d) Pig

12. Which one of the following was *not* known to the Harappans?
    (a) Construction of wells
    (b) Construction of pillars
    (c) Construction of drains
    (d) Construction of arches

13. Consider the following pairs:

Place	Finding
A. Lothal	1. Ploughed field
B. Kalibangan	2. Dockyard
C. Dholavira	3. Terracotta replica of a plough
D. Banawali	4. An inscription comprising ten large-sized sign of the Harappan script

    Select the correct answer from the codes given below:

	A	B	C	D
(a)	1	2	3	4
(b)	2	1	4	3
(c)	1	2	4	3
(d)	2	1	3	4

SUPPLEMENT