

**SPACE**

PRE-CONTEXT

**GAGANYAAN**

THE HINDU, PG.NO: 4.

**News:** "Gaganyaan-G1 to test capabilities ahead of manned flight."

**About Gaganyaan:**

- A 3 day mission, **launching of 3 crew members** to Low Earth Orbit (**LEO**) of **400km** and bringing them back safely to Earth by landing in sea waters.
- **Rocket:** human related **LVM 3. (3 stages:** Solid-Liquid-Cryogenic).
- **Orbital Module:** Crew are placed here (Earth like environment inside) with life support systems.
- **Service Module:** provide supporting services to crew module.
- **Crew Escape System:** An emergency escape measure designed to quickly pull crew module to a safe distance from the launch vehicle in event of launch abort.
- **Russia is assisting ISRO** with Astronauts training.
- **Countries launched Humans to Earth orbit:** **Russia, USA, China.**

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**DEFENCE**

PRE-CONTEXT

**BALLISTIC MISSILE**

THE HINDU, PG.NO: 12.

**News:** "Pak. ballistic missile programme an emerging threat to U.S.: White House."

**Characteristics of Ballistic Missile:**

- **Range:** varies from **continental to intercontinental range** with striking distance across globe.
- **Payloads:** Nuclear warheads, Conventional warheads, Multiple Independently Targetable Reentry vehicles (MIRVs).
- **Delivery systems:** from Land, Air and Submarine launched.
- **Path:** **parabolic trajectory.**

**Countries with ICBM:**

- USA, Russia, China, France, **India (AGNI-V)**, North Korea, UK.

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**TECHNOLOGY**

PRE-CONTEXT

**UNDERSEA CABLES**

THE HINDU, PG.NO: 10.

**News:** "New undersea cables to boost India's digital connectivity."

**Importance of Undersea cables:**

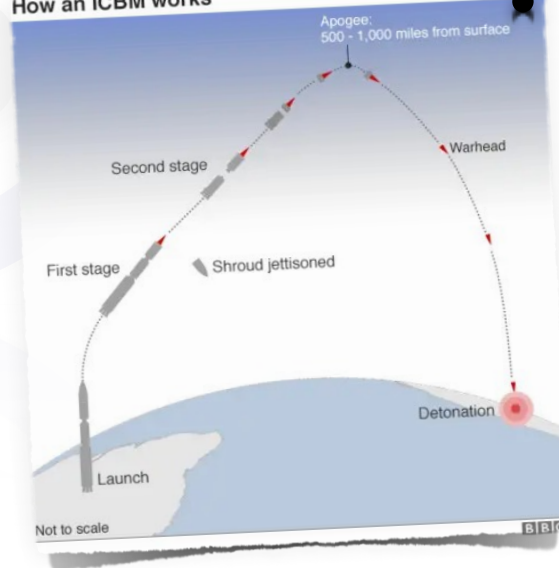
- Global Connectivity, Support international trade and business operations, essential for national security, real time data analytics, streaming services etc.
- **Two new cable systems are set to be launched in the coming months:**
  - **IndiaAsia Xpress (IAX):** connects Chennai and Mumbai with Singapore, Thailand, and Malaysia in Asia.
  - **India Europe Xpress (IEX):** connects them with France, Greece, Saudi Arabia, Egypt, and Djibouti.

**Regulation Framework:**

- **UNCLOS:** Primary international treaty outlining the **legal framework for ocean activities**, including undersea cable laying and maintenance.
- **International Telecommunication Union:** **specialized agency of the UN**, plays a pivotal role in the **global management and regulation of telecommunication infrastructures**, including undersea cables.

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How an ICBM works





## ECONOMY

PRE-CONTEXT

### TRADE AGREEMENTS

THE HINDU, PG.NO: 11.

**News:** "India raises trade barriers issue with EU."

#### Types of Trade Agreements:

##### Preferential Trade Agreement (PTA):

- PTA gives **preferential access to certain products from the participating countries.**
- Done by **reducing tariffs** but not by abolishing them completely.
- **Lowest level of commitment** to reduce tariffs.
- India and African countries (Botswana, South Africa etc).

##### Generalised System of Preferences (GSP):

- This allows **developed countries** to grant Preferential tariff treatment to **eligible developing countries and LDCs.**
- This ensures improved access to markets in developed countries.
- Eligibility criteria are set by importing countries.
- In 2019, **USA withdrew GSP benefits to India.**

##### Free Trade Agreement (FTA):

- Eliminates tariffs, import quotas, and preferences on most (not all) goods & services between member countries.
- Eg. **India-Israel.**

##### Comprehensive Economic Cooperation Agreement (CECA):

- Less comprehensive than CEPA, but ambitious than FTA.
- **India signed CECA with: Australia, Singapore.**

##### Comprehensive Economic Partnership Agreement (CEPA):

- Deepens economic cooperation & integration by eliminating barriers to trade and investments.
- **India signed CEPA with: UAE, Canada, Japan, South Korea, Mauritius.**

#### Non Tariff Barriers (NTBs)

- NTBs are **trade restrictions** that countries use to control trade **without imposing direct taxes or duties on imported goods and services.**

##### Common types of NTBs:

- **Import Quotas:** Limits on the quantity or value of specific goods that can be imported into a country
- **Licensing Requirements:** Mandatory authorizations or permits required to import or export certain goods.
- **Subsidies:** Financial assistance provided by governments to domestic industries to make their products more competitive internationally.
- **Standards and regulations:** Technical Standards Eg. ISO standards, Phytosanitary measures.
- **Local Content Requirements:** Mandates that a certain percentage of a product must be produced domestically.

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## GS II

SYLLABUS: PARLIAMENT AND STATE LEGISLATURES—STRUCTURE, FUNCTIONING.

### PARLIAMENT FUNCTIONING

THE HINDU, PG.NO: 6.

**News:** "Frosty and bitter."

#### Need for Productivity:

- Upholding Democracy.
- Responsibility to people Art.75.
- Ensuring Checks and Balances.
- Scrutiny of legislative proposals in detail.
- Debate-Discussion-Deliberation.

#### Causes of low productivity:

- **Sittings:** First two decades: met average 120 days last decade avg 70 days.
- **The 18th LS's first winter session:** was **one of the least productive in history**, with a productivity of 55% for the Lok Sabha and 40% for the Rajya Sabha.
- **Increased use of Guillotine:** passing Bills, demand for grams without debates. Average time to pass a bill in Lok Sabha is <10mins & in Rajyasabha is <30min.
- **Frequent disruptions and Adjournments during question hour** between 2004 and 2014, the Lok Sabha lost 50% of **Question Hour** time to disruptions—**PRS Study.**
- **Lack of consensus building mechanisms** i.e due to ineffective **Business Advisory Committee** (BAC) and party **whips.**
- **Since 2004, only 45% of total bills** have been referred to committees.
- **Vacancy of Deputy Speaker post:** since 2019, **"against the letter and spirit of the Constitution"**—**Former CJI D.Y. Chandrachud.**

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#### PYQs

**GS II 2019:** Individual Parliamentarian's role as the national lawmaker is on a decline, which in turn, has adversely impacted the quality of debates and their outcome. Discuss.



## ECONOMY

PRE-CONTEXT

### INFLATION AND GROWTH

THE HINDU, PG.NO: 11.

**News:** "We find ourselves in a slow growth, high inflation scenario."

#### Economic Growth

- Economic growth refers to an increasing production of goods and services in an economy over a period of time.
- In India economic growth is measured using Real GDP.
- **Real GDP:** Calculation of prices of goods and services produced in an economy *adjusted for inflation*.
  - Economic growth and Real GDP are directly proportional.
- **Nominal GDP** is calculation at *current price* (includes inflation).
- **Slowdown:** When rate of change of Real GDP is *decreasing* but not negative.
- **Recession:** When rate of change of Real GDP is *negative*.
- **Melt down:** steep fall of stock markets.
  
- **Economic growth can happen even without generation of employment.** Eg. Jobless growth, increased labour productivity, better technology, outsourcing etc.

#### About Monetary Policy Committee:

- **Type:** *Statutory body* under *RBI Act 1934*. (Established in 2016).
- **Urjit Patel committee** recommended the formation of MPC.
- **Constituted by:** Central Govt. where 3 members from RBI and 3 nominated by government (nominee must not be a government official).
- **Responsibilities & Functions of MPC:**
  - Entrusted with the responsibility of *deciding the different policy rates*, including *MSF, Repo Rate (RR), Reverse Repo Rate (RRR), LAF* etc.
  - To *ensure price stability* with sustainable growth.
  - *Inflation targeting @ 4% with 2% buffer*.
  - Required to *meet at least four times in a year*.
  - **Decisions are taken by majority**, Governor has a casting vote in case of tie.
  - **RBI must publish half-early MPC report** explaining sources of inflation, forecast of 18 months ahead.
  - In case of failure, it should submit **report to Central Govt.**
- **Instruments of MPC:**
  - *LAF, MSF, MSS, OMO (RR & RRR), CRR, SLR, Bank Rate.*
- **Failure of MPC:** when average inflation is higher or lower than the desired limit for 3 consecutive quarters.

#### Challenges to Inflation Targeting:

- **Food inflation challenges:**
  - Monsoon dependent agriculture.
  - Lack of cold storage facilities for perishable goods.
  - Rising input costs.
- **Policy related Challenges:**
  - **Ineffective monetary policy transmission** shows implementation challenges in Banking system.
  - **Fiscal policy:** fiscal deficit remained above FRBM norms since 4 years, adding to increased inflation.
  - **Unemployment issues all year around.**
- **Global Challenges:**
  - Wars and Pandemics.
  - Disruption of Supply chains.
  - Foreign central bank Policies.

- Climate change Eg. El Niño phenomenon, droughts.

#### Suggestions:

- **For Food Inflation:**
  - Creation of Buffer stocks for essential food items.
  - Banning exports and imposing stock limits.
- **For Core inflation:**
  - **Higher R&D allocation:** Climate smart agri- reduces Supply shocks.
  - **Rationalising Fertiliser subsidies:** ₹5T in 2022-23, needs to be reduced.
- **Policy measures:**
  - **Coordinated monetary and fiscal policy:** To tackle global disruptions Eg: Oilseeds, Cereals.
  - **Check to freebies:** instead promote rural investments, rural infrastructure, competitiveness in agriculture.
  - **Spending on Infrastructure:** increases multiplier effect Eg: During Covid India showed World how to manage inflation while protecting GDP growth.
  - **Different inflation targets:** Benefits for different classes Eg: Food-3-4%.
  - **Improving Data quality and frequency:** AI based Data processing.

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