

ECONOMIC GROWTH AND DEVELOPMENT

Context: India's position in global economic growth and India's challenges and concerns in realizing its potential growth while meeting the targets for the budget deficit

Why in News

The International Monetary Fund (IMF) projects that India's 2% share of world economic growth would increase over the next five years, from 16% to 18%, as the country's economy grows more quickly.

What are the Factors Contributing to India's Projected Growth?

➤ **Monsoon:**

- While the overall rainfall was 6% below the expected during the monsoon season (due to 36% deficit rains in August), the spatial distribution is quite even.
- Out of 36 states/UTs, 29 received normal/above-normal rains.
- The SBI Monsoon Impact Index, which considers the spatial distribution, has a value of 89.5, faring much better than the full season index value of 60.2 in 2022.

➤ **New Company Registrations:**

- The substantial number of new company registrations indicates a desire for rapid expansion.
- In the first half of 2023, there were about 93,000 registered companies, up from 59,000 five years earlier.
- It's interesting to notice that, from 395 in 2018–19 to 622 in 2023–24 (a 58% rise), more new companies were registered on average every day.

➤ **Credit Growth:**

- Since the beginning of 2022, the credit growth of all scheduled commercial banks (SCBs) has been increasing annually
- Up to September, loans increased by 20% and aggregate deposits by 13.2%.
- The government anticipates that the holiday season will keep credit demand strong in the upcoming months.

➤ **Formalization of the Economy:**

- Over the past ten years, the Indian economy has been more formalized, which is responsible for the increase in credit.
- The banking sector is progressively integrating people who have never had credit before.
- About forty percent of the new credit accounts created in the last nine years come from first-time creditors.
- At least 10% of the incremental credit growth is attributed to this group.

What obstacles does India need to overcome to achieve its anticipated growth?

➤ **Weak Demand:**

- A number of reasons, including low income growth, high inflation, unemployment, and the effects of the Covid-19 outbreak, have contributed to India's weak demand for products and services.
- This has lowered the government's tax collection and impacted the economy's levels of investment and consumption.

➤ **Unemployment:**

- In spite of the economy's explosive expansion, unemployment is still a major problem in both rural and urban areas.
- The Covid-19 pandemic has made matters worse by causing numerous firms to shut down or scale back operations, which has resulted in employment losses.
- The Periodic Labour Force Survey (PLFS) report for 2021–2022 from the National Statistical Office (NSO) states that the unemployment rate for that year was 4.1%.

➤ **Inadequate Infrastructure:**

- India's lack of power, water, sanitation, railroads, and roads impedes its ability to grow economically and compete internationally.
- The World Bank estimates that India has an infrastructure deficit of about \$1.5 trillion. People's health and quality of life are also impacted by poor infrastructure, particularly in rural areas.

➤ **Balance of Payments Deterioration:**

- India's imports surpass its exports, resulting in a continuous current account deficit.
- This is a reflection of its low export competitiveness and reliance on imported products and services, particularly gold and oil. In comparison to 2021, India's imports and exports fell by 3.63% and 6.59% respectively, in 2022. It will be challenging to reach the USD 2 trillion export goal by 2030 at this rate.

- **Geopolitical Tensions:**
 - India's geopolitical ties, particularly border disputes, may have an effect on the stability of the region and possibly on the country's economic future.
 - India is becoming more and more susceptible to world economic uncertainties, such as continuous wars and conflicts that could cause supply shortages and inflation of crude oil.
- **Trade imbalances:**
 - India and a few of its main trading partners have unbalanced trade, which can impact its economic growth and stability
- **Increasing Private Investment:**
 - Due to its ability to boost competitiveness, productivity, and innovation, private investment is a major contributor to economic growth.
 - In order to facilitate business operations, lower corporation tax, offer credit guarantees, and draw in foreign direct investment, the government has launched a number of programmes.
 - To lower the cost and risk of conducting business in India, further reforms are required in sectors including labour, land, and logistics.
- **Increasing Competitiveness:**
 - By diversifying its exports, enhancing its infrastructure, encouraging innovation and digitization, and integrating with regional and international value chains, India may become a more competitive player in the global market.
 - The Phased Manufacturing Programme (PMP), Made in India, and Production Linked Incentive (PLI) are just a few of the manufacturing support initiatives that the government has unveiled.
 - To guarantee fair competition for both domestic and international businesses, trade liberalisation and regulatory simplification must be implemented in conjunction with these programmes.
- **Encouraging Green Growth:**
 - As part of its climate change goals, India has pledged to lowering its carbon intensity and raising its capacity for renewable energy.
 - To fund environmentally friendly infrastructure projects, the government has also established green bonds.
 - Nonetheless, greater work is required to address environmental issues that threaten India's development and well-being, such as air pollution, water scarcity, waste management, and biodiversity loss.
- **Preserve Economic Stability:**
 - India may be able to keep its inflation rate low and steady, which will encourage investment and trust.
 - Additionally, India may guarantee sufficient credit availability and liquidity for the productive sectors, particularly for small and medium-sized businesses.
 - To encourage saving and investment, India might also expand its financial institutions and markets.

Conclusion:

Steps in the Right direction such as simplifying the regulatory framework for ease of doing business and mitigating various challenges will ensure india's economic growth progress in the long run.

SCIENCE, SPACE AND TECHNOLOGY**CONTEXT:**

The Indian Space Research Organisation (ISRO) just completed the maiden test of Gaganyaan safety mechanism with success. Gaganyaan is expected to launch for the first time in 2025

- **Gaganyaan's Safety Mechanism:**
 - On December 18, 2014, the crew module made by Hindustan Aeronautics Limited (HAL) completed its first experimental unmanned flight.
 - The crew module's design was finished as of May 2019. The Defence Research and Development Organisation (DRDO) will provide vital human-centric technologies and systems, including fire suppression, parachutes for the crew module's safe recovery, healthcare for the crew, radiation protection, and food graded for space travel.

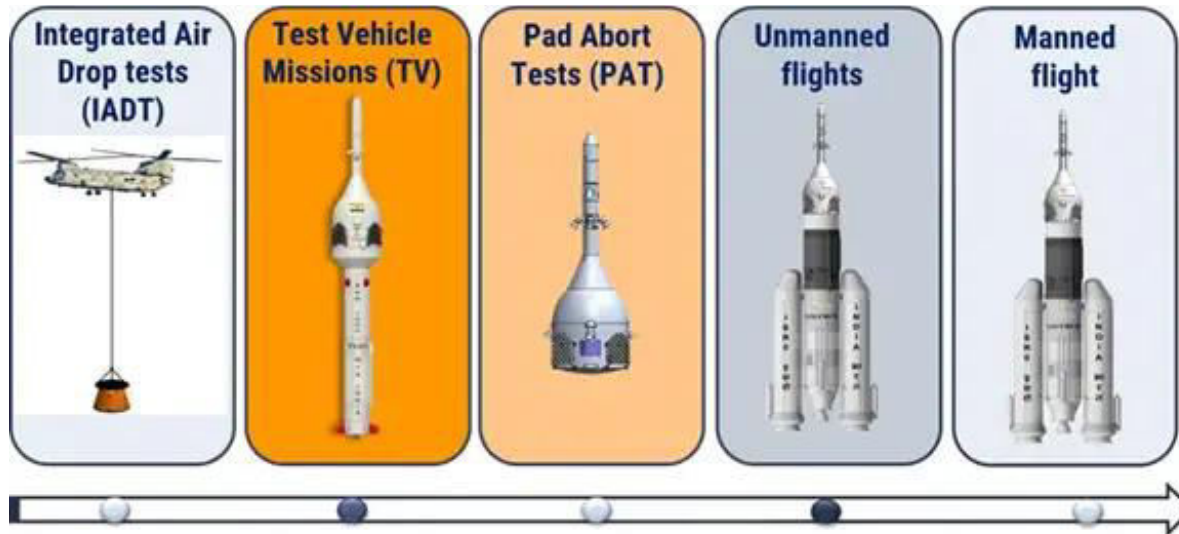


Figure of Gaganyaan development timeline

➤ **The Human Space Flight Centre (HSFC)**

- It is primarily responsible for leading ISRO's Gaganyaan programme through coordinated efforts.
- It also places a strong emphasis on human safety and high standards of reliability when conducting research and development (R&D) in new technological fields, including bioastronautics, crew training, human factors engineering, life support systems, and human rating and certification.
- Future prolonged human space flight operations, such as space station construction, interplanetary cooperative manned expeditions to the Moon, Mars, and near-Earth asteroids, would require these areas.
- Test Vehicle (TV) flights, Pad Abort Test (PAT), and Integrated Air Drop Test (IADT) are some of these demonstrator missions. Prior to human operations, all systems' dependability and safety will be shown via unmanned missions.

➤ **LVM3 Rocket - HLVM3 - Human rated:**

- The launch vehicle for the Gaganyaan mission is the ISRO heavy lift launcher, which has a long history of reliability and success.
- There are three stages in total: solid, liquid, and cryogenic.
- In the event of an emergency at the launch pad or during the ascent phase, the Crew Escape System (CES) powered by a series of fast acting, high burn rate solid motors guarantees that the Crew Module and crew are removed to a safe distance as part of HLVM3.

➤ **LVM3 - HLVM3 Orbital Module:**

- Crew Module (CM) and Service Module (SM) make up the Orbital Module (OM) that will orbit Earth. Modern avionics systems with sufficient redundancy in mind for human safety are installed aboard OM.
- For the crew, CM is a habitable space with an environment similar to Earth. Its double-walled design includes an unpressurized exterior structure with a thermal protection system and a pressurized metallic inner structure (TPS).
- It contains the avionics, deceleration systems, life support system, crew interfaces, and human-centered goods. In order to guarantee crew safety from touchdown to descent, it is also built for re-entry.

➤ **Crew Training for Gaganyaan:**

- Gaganyaan crew training is provided by the Bengaluru-based Astronaut Training Facility, which offers classroom, flight suit, simulator, and physical fitness training.
- Academic courses, Gaganyaan Flight Systems, Aero-medical training, Recovery & Survival training, Aero-gravity familiarisation through Parabolic Flights, mastery of Flight Procedures, and Crew Training Simulator training are all included in the training modules.
- The programme also includes yoga, periodic flying practise, and aeromedical instruction.

➤ **Regarding Gaganyaan**

- Indian crewed orbital spacecraft Gaganyaan (from Sanskrit gagana, "celestial" and yāna, "craft, vehicle") is meant to be the prototype spacecraft for the Indian Human Spaceflight Programme.

- Three people will be able to board the spacecraft, and an enhanced version with rendezvous and docking capability is planned.
- The goal of this Indigenous mission is to show off human spaceflight capabilities.
- Over the course of its three-day journey, it will be launched into a 400 km orbit and land safely in Indian Ocean seas to return them to Earth.
- The human crew module will be launched into space using the GSLV Mk-III.

➤ **Key Facts**

- Three no. of crew members to go to the manned mission
- Cost of the programme is estimated to be around Rs 9023 crore
- Duration of the mission is around 5 to 7 days

➤ **Aim of the Mission**

- To open opportunities for research and development in science and Technology and in areas such as Medicine, Agriculture, Industrial Safety, Pollution, Waste management, water and Food Resource Management.

➤ **The importance of Gaganyaan project:**

- **It has economic potential.** Nearly 60% of the equipment needed for the mission will likely come from private Indian companies. The head of ISRO said that 15,000 new jobs would be generated by the Gaganyaan mission. 13,000 of them in the commercial sector, and the space organisation would require an extra 900 workers.
- **Technology:** The frontier of science and technology is human spaceflight. Technology spinoffs in fields including robotics, health, agriculture, industrial safety, pollution, waste management, and the management of water and food resources will benefit from it.
- **Scientific Temper and Inspiration:** The goal is to instill a scientific temper in young people and encourage them to pursue careers in science and technology for the benefit of the country.
- **Space Tourism:** India can gain trust and draw a sizable number of space tourists from both domestic and international sources thanks to its solid track record of ISRO's successful launches and completion of the Gaganyaan mission.
- **Boost for India's Space Programme:** Industry, academia, and national agencies will all be involved in the country's largest initiative, Gaganyaan. The lessons learned from this programme can be used to ISRO's upcoming space missions, including Chandrayaan-3 and Shukrayaan-1.
- **Research and Development:** By providing a unique microgravity platform in space for experiments and test beds for future technologies, the human spaceflight project would pave the way for India to establish its own space station by 2030.
- **Global Prestige:** with the successful launching of Gaganyaan, India will move up to fourth place in the globe behind the United States, China, and Russia in terms of human space missions launched. Thus, the mission would not only help the country gain status and recognition, but it will also make it a major player in the space sector.

Conclusion:

India will join the exclusive group of space superpowers if Gaganyaan is successful. The necessary technology has already been created by ISRO, and numerous testing have been carried out to ensure the mission's successful launch. Additionally, this will strengthen India's strategic standing in the world and serve as a powerful instrument for international space policy.

PRELIM FACTS

1 Gaganyaan's First Flight Test Vehicle Abort Mission-1 (TV-D1)

Context. ISRO successfully completed Gaganyaan's First Flight Test Vehicle Abort Mission-1 (TV-D1). It is officially known as "In-flight Abort Demonstration of Crew Escape System (CES)".

- TV-D1 is a single-stage liquid-propelled Test Vehicle powered by a modified VIKAS engine.
 - The payloads are the Crew Module [CM] and Crew Escape Systems [CES] located on the forend.
 - The CM utilized was similar to that which will contain crew members during their ascent into space, although it was not pressurized.
- The aim was to assess CES's ability to transport the CM to safety in the event of an emergency.
- **About the test**
 - It simulated the abort condition during the Gaganyaan mission's ascent trajectory.
 - When an abort signal was activated, CES with CM was separated from the Test Vehicle.
 - The CM then exited CES, deployed parachutes, and splashed down into the water.
- ISRO will thereafter conduct a test flight with the 'Vyomitra' robot.

- Gaganyaan is India's first manned spaceflight mission.
 - It intends to launch a three-person crew into a 400km low-Earth orbit for three days.
 - After the United States, Russia, and China, India will be the fourth country to send a crewed spacecraft into orbit.

2. 'Global Tax Evasion Report 2024'

Context: The European Union Tax Observatory has published its 'Global Tax Evasion Report 2024'

- Tax evasion is an illegal activity in which a person or company intentionally fails to pay a true tax burden.
- **Highlights** from the reports :
 - \$1 trillion profit migrated to tax havens (in 2022), with negligible effects from policies such as Base Erosion and Profit Shifting (BEPS, 2015).
 - Global billionaires have low personal effective tax rates(between 0% and 0.5% of their wealth).
 - Offshore tax avoidance has decreased as a result of the automatic transmission of bank information
- **Reasons** for tax evasion : High tax rates, low penalties for tax evasion, preferential tax regimes adopted by countries in order to keep tax rates low, a lack of global collaboration, and so on.
- **Common methods** of tax evasion include: Misreporting income, storing funds outside of the country, utilizing shell businesses, falsifying financial accounts, and so on.
- **Recommendation :**
 - Remove the loopholes that encourage tax competitiveness and impose a minimum corporate tax of 25%.
 - Introduce a new worldwide minimum tax of 2% of billionaires' wealth.
 - Make progress toward the establishment of a Global Asset Registry (an international registry of all wealth and assets).
 - Implement systems to tax wealthy people who have lived in a country for a long time and choose to relocate to a low-tax country.

3. Project UDBHAV

Context: 'Project UDBHAV' launched during inauguration of Indian Military Heritage Festival.

- **About** Project UDBHAV
 - It is a collaborative project between the Indian Army and the United Service Institution of India (USI), a think tank.
 - **Objective:** To synthesize ancient wisdom with contemporary military practices for modern security challenges.
 - The ancient Indian knowledge system related with war includes Chanakya's Arthashastra (strategic partnerships, diplomacy, soft power projections, etc.) and Thirukkural (Ethical conduct in warfare).
- Thirukkural is a Tamil text by Thiruvalluvar

4.Purple Economy

- It is also referred to as the care economy.
- It recognizes the importance of care work, empowerment and autonomy of women to the functioning of the economies, wellbeing of societies, and life sustainability.
- Care work can be paid or unpaid.
- Men's involvement in unpaid caregiving and domestic work is significantly lower compared to women.
 - According to the ILO, the value of unpaid care work would be 0.4 percent of the GDP for men and 3.1 percent of the GDP for women.

5.Manual Scavenging

Context: The Supreme Court directs the Union and state governments to completely eliminate manual scavenging.

- Manual scavenging is defined as the act of cleaning, carrying, or handling human excreta in an unsanitary latrine, an open drain or pit, or on a railway track, among other things.
 - In 2021, India had roughly 58,098 manual scavengers, with more than 75% of them being women.
 - Between 2018-22, 339 people died cleaning sewers and septic tanks.
- Directions granted in the case of Dr. Balram Singh v. Union of India for the efficient implementation of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act 2013.
- The Supreme Court has ordered that compensation for sewer deaths be doubled to Rs.30 lakhs.

- Permanent disablement and other forms of disablement are compensated at Rs.20 lakhs and Rs.10 lakhs, respectively.
- Scholarships and skill programs are available to assist victims and their families in their rehabilitation.
- **Prohibition of Employment as Manual Scavengers and their Rehabilitation Act 2013**
 - Prohibition: No individual or organization may contract or employ anyone for manual scavenging.
 - Cleaning excreta using protective gear, on the other hand, is not called manual scavenging.
 - Violation of the act is punishable by imprisonment for up to two years or a fine of up to one lakh rupees, or both.
 - Local governments must identify manual scavengers, dismantle 'insanitary latrines,' and keep communal sanitary latrines in good working order.
- **Initiatives**
 - National Action for Mechanized Sanitation Ecosystem (NAMASTE)
 - Swatch Bharat Mission: the word "manhole" was replaced with "machine-hole" in official usage.
 - National Safai Karamcharis Finance and Development Corporation (NSKFDC) provides financial assistance at concessional rates for their upliftment.

6. Fast Radio Burst

Context: Astronomers have discovered Fast Radio Bursts (FRB) from a galaxy merger that occurred 8 billion years ago.

- **About:** Fast Radio Burst is a bright and brief burst of electromagnetic radiation detected at radio-wave frequencies that lasts thousands of milliseconds.
 - FRBs were detected for the first time in 2007.
 - Until now, the oldest known FRB dated back 5 billion years.
- The Australian Square Kilometre Array Pathfinder, a radio telescope in Australia, was used to detect it.
- FRBs are common phenomena in the universe, but because they lose energy when they reach Earth, they are difficult to detect.
- FRBs pass through hot gas as they travel across galaxies and between them, causing their low-frequency radio waves to slow down more than those at higher frequencies, a phenomenon called as dispersion.
 - Scientists can now identify and measure 'matter' between galaxies that are now undetectable to humans.
- **Causes** of FRBs are not entirely known, however:
 - Stellar remnants, such as white dwarfs (dense, hot, compact star remnants), neutron stars (formed by massive star collapse), and colliding galaxies are considered sources of FRBs.
- **Significance:** assists in exploring the expansion of the Universe and even 'weighs' the Universe.

ANSWER WRITING

Q. "India's growing population, if not leveraged adequately, can translate from a demographic dividend to a demographic burden." Critically evaluate the given statement.

Introduction

The term "demographic dividend" describes the potential for economic growth that arises from changes in the age distribution of a population, particularly when the proportion of the working-age population surpasses that of the non-working-age population. India's population is predicted to surpass China's by mid-year, according to the UN Population Fund's (UNFPA) annual State of World Population Report. There are prospects for economic growth when the population grows. But India also runs the risk of losing out on a demographic edge if significant steps are not taken to capitalize on this advantage.

➤ **How the increasing population of India presents a demographic opportunity**

- **Contribution to economic growth:** A higher proportion of productive individuals who can make a positive impact on the economy can be advantageous for economic growth. In light of the current situation, there exists a noteworthy demographic opportunity that has the potential to raise per capita GDP by 43% by the year 2061.
- **Women's empowerment:** Longer lifespans and lower fertility rates allow women to seek employment and break out from traditional home duties. This leads to a greater degree of female empowerment.
- **Rise in saving rates:** An increase in the savings rate is one of the demographic dividend's main effects. An economy will save more when there is a demographic dividend because there will be fewer dependents, and the resources that the dependents would have otherwise used up can now be preserved.
- **Greater investment in human capital:** Women who have lower fertility rates are healthier and face less domestic financial strain. Additionally, it enables parents to allocate more funds for each child, improving academic and health results.

- **Labour supply:** As more people reach working age, there is a corresponding rise in the labour supply due to population growth. But the extent of this advantage seems to depend on the economy's capacity to take in and use the additional labour force effectively.
- **India's demographic dividend could become a demographic burden in the following ways if it is not appropriately leveraged:**
 - **Jobless growth:** The Centre for Monitoring Indian Economy (CMIE) reports that the country's unemployment rate is currently between 7 and 8 percent. This is due to the fact that job growth has lagged behind GDP growth. Merely 40% of the workforce that have the ability to work is either employed or actively seeking employment. Furthermore, even with highly educated credentials, there remains a persistent young unemployment problem in India.
 - **Pressure on natural resources:** An increasing population creates new difficulties and increases demand on essential resources including food, water, land, and energy.
 - **Informal economy:** In India, the vast majority of workers hold informal jobs. The informal economy employs nine out of ten workers, posing a significant challenge to policymakers. These labourers are more vulnerable to exploitation since they are sometimes invisible to the system.
 - **Women's participation in the workforce is declining:** The World Bank's most recent data shows that women's participation in both the formal and informal labour markets in India is declining. Women made up 23% of the workforce in 2021, down from over 27% in 2005. Bangladesh and Sri Lanka, two nearby countries, have reported roughly 32% and 34.5%, respectively.
 - **Regional differences across the nation:** Depending on the demographic makeup of each state in India, different states have different potential for demographic dividends. For instance, the population of Kerala is ageing, whereas the workforce in Bihar is expected to grow till 2051.
- **Way forward:**
 - By increasing production, employment, and salaries, investments in education can boost overall economic growth and provide citizens with more opportunities to participate in it.
 - There is a huge skills gap since, during the past ten years, skilling activities have not kept up with population growth. Consequently, the emphasis ought to be on enhancing and reskilling, as this would promote the creation of jobs.
 - Investments made in women and children through the adoption of progressive laws and initiatives.
 - It is imperative that increasing concerns including migration, ageing, skilling, female workforce participation, and urbanization be addressed through federal government reforms.
 - Given India's population makeup, there are more opportunities for a demographic dividend than a burden.
 - It is necessary for the nation to concentrate on the key components that turn a demographic excess into an economic advantage.

Conclusion:

Given India's population makeup, there are more opportunities for a demographic dividend than a burden. It is necessary for the nation to concentrate on the key components that turn a demographic excess into an economic advantage.

MCQs

1. With reference to the Agniveers, consider the following statements:
 1. The Agniveers are recruited through Agnipath Scheme across the three services i.e., Army, Navy and Airforce.
 2. Seva Nidhi is a scheme which is contributed by the Agniveer approximate 30% with equal matching contribution by the Government
 3. An Agniveer's family is entitled to receive pay for the remaining tenure from the date of death, amounting to over Rs 13 lakh, as well as a contribution of Rs 8 lakh from the Armed Forces Battle Casualty Fund.

How many of the above statements are not correct?

(a) Only one

(b) Only two

(c) All three

(d) None
2. Consider the following statements regarding raising questions in Parliament:
 1. MPs can submit up to five notices of questions (both oral and written) for a single day.
 2. Generally, the notice period for a question is at least 17 days but in case of a short notice question, a notice of less than 8 days is prescribed as the minimum period.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

3. Consider the following statements regarding Capital Expenditure:
1. Expenses related to acquiring, improving, or extending long-term assets or investments expected to benefit for more than one financial year.
 2. It includes -acquiring new machinery, Routine machinery maintenance, employee salaries, advertising costs, utility bills.
 3. It is subject to depreciation or amortization, leading to a delayed tax impact and often lower taxable income in the year of purchase.
- How many of the above statements is/are not correct?
- (a) **Only one**
(b) Only two
(c) All three
(d) None
4. Consider the following statements:
1. Microalgae are present at the top layer of the ocean surface.
 2. Microalgae, though among primary producers in the ocean, have lesser photosynthetic efficiency than terrestrial plants.
 3. Microalgae can produce food and absorb CO₂ even in less availability of sunlight and iron.
- How many of the statements given above are correct?
- (a) **Only one**
(b) Only two
(c) All three
(d) None of the above
5. Consider the following statements regarding Jagannath Temple:
1. It is an example of Kalinga architecture, featuring distinctive curvilinear towers and ornate sculptures.
 2. It is also called 'Yamanika Tirtha' because here, according to the Hindu beliefs, the power of 'Yama', the god of death, has been nullified due to the presence of Lord Jagannath.
 3. Snana Yatra is a major festival associated with the deities of Jagannath temple.
- How many of the above statements are correct?
- (a) Only one
(b) Only two
(c) **All three**
(d) None of the above
6. Consider the following statements:
1. Graphite is a naturally occurring mineral composed of carbon and is one of the three crystalline forms of carbon.
 2. Graphite is a good conductor of electricity but a bad conductor of heat.
 3. Graphite has lubricating properties due to its layered structure that allows for easy sliding between the layers.
- How many of the statements are correct?
- (a) Only one
(b) **Only two**
(c) All three
(d) None
7. 'Cyclone Hamoon' is formed in which of the following region?
- (a) Bay of Bengal
(b) Arabian Sea
(c) Red Sea
(d) Mediterranean Sea
8. Consider the following statements regarding Best Tourism Village:
1. Dhordo village of Rajasthan has been conferred the prestigious title of Best Tourism Village 2023.
 2. The award is given by the United Nations World Tourism Organisation (UNWTO).
- Which of the above statements is/are correct?
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
9. Which of the following set of countries share a border with Serbia?
- (a) Romania, Greece, and Bulgaria
(b) Croatia, Hungary, and North Macedonia
(c) Montenegro, Bosnia and Herzegovina, and Croatia
(d) Albania, Kosovo, and Bulgaria
10. Consider the following statements, with reference to Settlement Guarantee Fund (SGF):
1. A Settlement Guarantee Fund (SGF) is a corpus used for settlement of trades during defaults.
 2. All intermediaries such as stock exchanges, clearing corporations and brokers contribute towards SGF.
 3. SGF is received only in the form of securities.
- How many of the above statements given above are correct?
- (a) Only one
(b) Only two
(c) All three
(d) None