N 869– Social Sciences (73) Geography - Paper II - 20 25 Question Paper with Solutions

Time Allowed :2 Hours | Maximum Marks :40

General Instructions

Read the following instructions very carefully and strictly follow them:

- 1. All questions/activities are compulsory.
- 2. Figures to the right indicate full marks.
- 3. For Q. No. 4(A) use supplied outline map of Brazil and tie it to your Correct Answer-book.
- 4. For Q. No. 6(A) use the graph paper supplied to you and attach it to the main Correct Answer-book.
- 5. Use of stencil is allowed for drawing the map.
- 6. Draw neat diagrams and sketches wherever necessary.
- 7. Correct Answers should be written in Black or Blue ink pen only.
- 8. Use of pencil/colour pencil is allowed for diagrams, sketches and map work.
- 9. Correct Answers written in pencil will not be considered.

1 Complete the following sentences by choosing the appropriate alternatives from those given and rewrite the sentences in your Correct Answer-book:

- (1) India and Brazil have type of government.
 - 1. Military
 - 2. Communist
 - 3. Republic
 - 4. Presidential

Correct Answer: (3) Republic type of government (India and Brazil)

Solution: Step 1: Meaning of a Republic

A republic is a system where the head of state is elected (directly or indirectly) for a fixed term; the office is not hereditary. Popular sovereignty, rule of law, and a written constitution are its core features.

Step 2: India is a Democratic Republic

India's Constitution establishes a parliamentary democracy and a republic. The President of India—the head of state—is elected by an electoral college \Rightarrow the position does not pass by birth, satisfying there

Step 3: Brazil is a Federal Presidential Republic

Brazil elects its President by popular vote. The President is both head of state and head of government, serving a fixed term $\Rightarrow again, nohereditary succession. This aligns fully with republicangovernance and the state of the president is both head of state and head of government, serving a fixed term <math>\Rightarrow again, nohereditary succession. This aligns fully with republicangovernance and the state of the president is both head of state and head of government, serving a fixed term <math>\Rightarrow again, nohereditary succession. This aligns fully with republicangovernance and the state of the president is both head of state and head of government, serving a fixed term <math>\Rightarrow again, nohereditary succession. This aligns fully with republicangovernance and the state of the s$

Step 4: Common Thread

In both countries, the highest office of the state is derived from the consent of the people through elections $\Rightarrow hence$, **Republic**.

Both India and Brazil are Republics because their heads of state are elected, not hereditary.

Quick Tip

Quick Tip: Republic \Rightarrow elected head of state; Monarchy \Rightarrow hereditary head. Keep this binary in mind to classify countries quickly.

- (2) The Himalayas block the winds blowing from the north.
 - 1. Very cold
 - 2. Very hot
 - 3. Hot and dry
 - 4. Humid

Correct Answer: (1) The Himalayas block very cold winds blowing from the north.

Solution: Step 1: Winter Wind Source

In winter, extremely cold, dry continental air masses form over Central Asia/Siberia. These would, in the absence of barriers, advect southward into the Indian subcontinent.

Step 2: Orographic Barrier

The Himalayas rise abruptly to great heights (many peaks $> 8000 \,\mathrm{m}$). Such a massive, continuous wall presents a mechanical block to low-level cold air advection. Cold, dense air struggles to surmount high relief \Rightarrow themountains deflect and weakenthesewinds.

Step 3: Climatic Outcome in North India

Because the cold winds are impeded, most of North India (Indo-Gangetic Plain) experiences cool to cold winters rather than the severe sub-zero conditions typical of Central Asia. Local cold waves can still occur, but the broad regional climate remains significantly milder than it

would be without the Himalayan barrier.

Step 4: Broader Role

This same barrier effect shapes monsoon dynamics (summer) and helps maintain distinct climatic regimes across South Asia.

The Himalayas act as a climatic shield, blocking frigid continental winds from the north.

Quick Tip

Quick Tip: Think "High Wall = Wind Block." Tall, continuous ranges (Himalayas) $\Rightarrow strongbarrier to cold continentalair.$

- (3) The economy of Brazil is mainly dependent on the activities.
 - 1. Primary
 - 2. Secondary
 - 3. Tertiary
 - 4. Quaternary

Correct Answer: (1) Brazil's economy is mainly dependent on primary activities.

Solution: Step 1: What are Primary Activities?

Primary activities involve the direct use of natural resources: agriculture (coffee, soy, sugarcane, beef), mining (iron ore, bauxite, gold), forestry (timber, pulp), and fishing. They form the base that feeds secondary (manufacturing) and tertiary (services) sectors.

Step 2: Brazil's Natural Resource Strength

Brazil's vast arable land, varied climates, and the Amazon/Planalto regions support large-scale farming and ranching. Extensive mineral belts supply iron ore and other minerals; a long coast-line and major rivers sustain fisheries.

Step 3: Economic Dependence—How to Interpret

While industry and services have expanded, primary activities: (i) contribute a major share of export earnings (e.g., soy complex, iron ore, meat, coffee), (ii) anchor employment and regional economies in many interior states, and (iii) create strong upstream—downstream linkages (agro-processing, logistics, bulk ports). Therefore, in terms of export structure and regional livelihoods, Brazil remains heavily tied to the primary sector.

Step 4: Takeaway

Primary activities are a foundational backbone for Brazil's external trade and many domestic

regions, even as the broader economy diversifies.

Primary activities (agriculture, mining, forestry, fishing) remain a core pillar of Brazil's economic base.

Quick Tip

Quick Tip: Remember sector ladder—Primary (natural resources) \Rightarrow Secondary (manufacturing) \Rightarrow Tertiary (services). Brazil's export basket still leans primary.

- (4) Areawise Brazil ranks in the world.
 - 1. Fifth
 - 2. Seventh
 - 3. Sixth
 - 4. Fourth

Correct Answer: (1) Areawise, Brazil ranks fifth in the world.

Solution: Step 1: Comparative Scale

Total area is a standard way to rank country size. Brazil spans roughly 8.5 million $\text{km}^2 \Rightarrow the largest in South America and #5 globally.}$

Step 2: Who's Bigger?

Only four countries are larger: **Russia** (1), **Canada** (2), **China** (3), **United States** (4). Brazil comes next at (5).

Step 3: Implications of Size

A vast area produces high *physiographic diversity* (Amazon Basin, Brazilian Highlands, Pantanal), *climatic variety*, and rich *biodiversity* and *resource endowments*—factors that influence population patterns and economic potential.

Brazil is the 5th-largest country on Earth by total area.

Quick Tip

Quick Tip: Mnemonic for top-5 area: " $\underline{R}eally \ \underline{C}old \ \underline{C}ountries \ \underline{U}sually \ \underline{B}ig" \Rightarrow Russia, Canada, China, USA, Brazil.$

2. Find the odd man out:

- (1) Materials to be carried for a field visit:
 - 1. Questionnaire
 - 2. Camera
 - 3. Computer
 - 4. Note-book

Correct Answer: (3) Computer

Solution: Step 1: Field Visit Materials

When students or researchers go for a field visit, they usually carry practical tools like a *questionnaire* for data collection, a *camera* for photographs, and a *note-book* for observations. These items are portable, easy to use outdoors, and directly useful for fieldwork.

Step 2: Why Computer is Odd

A *computer* is not typically carried to the field. It is bulky, requires electricity, and is generally used later for compiling and analyzing the collected information. Thus, among the listed items, the computer is the odd one out.

Computer is the odd one out.

Quick Tip

Quick Tip: Field visits need lightweight, handy tools for data collection, not heavy equipment like computers.

- (2) Rivers in Brazil:
 - 1. Amazon
 - 2. Paraguay
 - 3. Uruguay
 - 4. Ganga

Correct Answer: (4) Ganga

Solution: Step 1: Brazilian Rivers

The rivers Amazon, Paraguay, and Uruguay are major rivers located in South America, specifically within or bordering Brazil. They play a vital role in Brazil's transport, irrigation, and

hydropower.

Step 2: Ganga's Location

The Ganga is a prominent river, but it is located in India, not Brazil. Therefore, while the other three belong to Brazil, the Ganga does not fit in the group.

Ganga is the odd one out.

Quick Tip

Quick Tip: Always check the geographical context — Ganga is Indian, while Amazon, Paraguay, and Uruguay are South American.

- (3) Primary activities:
 - 1. Agriculture
 - 2. Mining
 - 3. Tourism
 - 4. Fishing

Correct Answer: (3) Tourism

Solution: Step 1: Nature of Primary Activities

Primary activities involve direct extraction of natural resources, e.g., agriculture, mining, and fishing. These are raw material—producing activities that form the foundation of an economy.

Step 2: Why Tourism is Different

Tourism is not a primary activity; it falls under the *tertiary sector*, which provides services. Unlike farming, mining, or fishing, tourism does not involve direct extraction from nature. Hence, it does not belong in this category.

Tourism is the odd one out.

Quick Tip

Quick Tip: Remember — Primary = raw resources, Secondary = manufacturing, Tertiary = services. Tourism is a service.

(4) Favourable factors for concentration of settlements:

- 1. Availability of water
- 2. Unfavourable climate
- 3. Fertile land
- 4. Favourable climate

Correct Answer: (2) Unfavourable climate

Solution: Step 1: Settlement Factors

Human settlements concentrate in areas with *favourable conditions*, such as abundant water, fertile land for cultivation, and a climate that supports comfortable living and agriculture. These are positive factors encouraging dense settlements.

Step 2: Why Unfavourable Climate is Odd

An unfavourable climate discourages settlement because extreme heat, cold, or dryness make living conditions harsh. It is the opposite of the other favourable factors listed and thus stands out as the odd option.

Unfavourable climate is the odd one out.

Quick Tip

Quick Tip: Settlements thrive where nature is supportive — water, fertile land, and good climate, not in extreme or hostile climates.

3. State whether the following sentences are right or wrong (any four):

1. The proportion of youth in India's population is high.

Correct Answer: True Solution: Step 1: Demographics of India

India has a very young population compared to many other countries. According to the latest census, a significant proportion of India's population is below the age of 35, with the median age being around 28 years. This makes India one of the youngest countries in terms of demographic structure.

Step 2: Youth Proportion in India

This youthful population is a key factor contributing to India's dynamic workforce and economic potential. The high proportion of youth is beneficial for driving growth and innovation in various sectors of the economy.

The proportion of youth in India's population is indeed high.

Quick Tip

Quick Tip: A high youth population means a higher working-age population, which can be a demographic dividend.

2. India and Brazil have the same seasons at the same time.

Correct Answer: False

Solution: Step 1: Seasonal Differences

India and Brazil are located in opposite hemispheres: India is in the Northern Hemisphere, while Brazil is in the Southern Hemisphere. This leads to opposite seasonal patterns in both countries. When it is summer in India (March to June), it is winter in Brazil. Similarly, when it is monsoon season in India (June to September), Brazil experiences its dry season.

Step 2: Solution of Seasons

This difference occurs because of the tilt of the Earth's axis and the direction of the Earth's orbit around the Sun. These factors determine the seasonal changes that occur in the Northern and Southern Hemispheres at different times of the year.

India and Brazil do not have the same seasons at the same time.

Quick Tip

Quick Tip: Remember — Northern and Southern Hemisphere have opposite seasons due to Earth's axial tilt and orbital position.

3. Manaus is a port on the confluence of Negro and the Amazon.

Correct Answer: True

Solution: Step 1: Geography of Manaus

Manaus is the capital of the state of Amazonas in Brazil, located at the confluence of the Negro and Amazon rivers. This geographical feature is significant because Manaus is an

important river port and trade hub for the Amazon region.

Step 2: Importance of Manaus as a Port

Manaus is an essential port for transportation and commerce within the Amazon Basin. The confluence of the Negro and Amazon rivers makes it a crucial point for navigation and connects various parts of the Amazon rainforest with other parts of Brazil and the world.

Manaus is indeed a port at the confluence of the Negro and Amazon rivers.

Quick Tip

Quick Tip: Manaus is strategically positioned at the meeting point of two major rivers — a key factor for trade and transportation in the Amazon.

4. The sex ratio is high in Brazil.

Correct Answer: False

Solution: Step 1: Sex Ratio in Brazil

Brazil's sex ratio is fairly balanced, but it is not particularly high compared to other countries. According to global health data, Brazil's sex ratio at birth is approximately 1.05 male(s) for every female. However, the overall sex ratio in Brazil is skewed slightly more towards women due to higher life expectancy in females.

Step 2: Comparing Brazil with Other Countries

While Brazil has a relatively balanced sex ratio, countries like the United Arab Emirates, Qatar, and some parts of Asia have skewed ratios due to gender-specific migration or selective practices.

Brazil's sex ratio is not particularly high.

Quick Tip

Quick Tip: A balanced sex ratio is generally 1:1, but variations can occur due to factors like life expectancy or migration.

5. Brazil is the only country in the world where both tigers and lions are found.

Correct Answer: False

Solution: Step 1: Tigers and Lions in Brazil

It is not true that Brazil is the only country with both tigers and lions. While lions and tigers are found in different parts of the world, Brazil is not home to either species in the wild. Tigers are native to Asia, while lions are native to Africa. Brazil does have zoos and wildlife reserves where both species are kept, but they are not native.

Step 2: Where are Tigers and Lions Found?

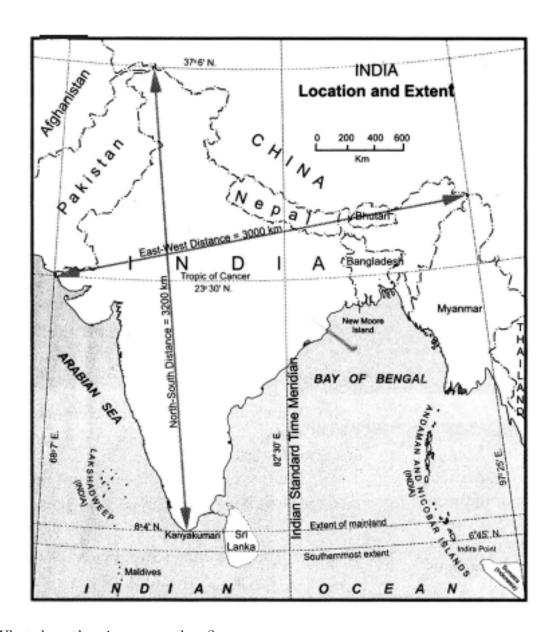
Tigers are primarily found in India, Southeast Asia, and parts of Russia, while lions are mostly found in sub-Saharan Africa, with a small population in the Gir Forest of India.

Brazil is not the only country where both tigers and lions are found.

Quick Tip

Quick Tip: Tigers and lions are native to different continents. While both can be found in zoos globally, they are not indigenous to Brazil.

- 4. (A) Mark the following in the outline map of Brazil supplied to you and give index $(any \ four)$:
 - 1. Pampas
 - 2. Marajo Island
 - 3. Capital of Brazil
 - 4. Pico De Neblina
 - 5. Parana River
 - 6. Maranhao State
- (B) Observe the map and Correct Answer the questions given below $(any\ four)$:



1. What does the given map show?

Correct Answer: The map shows the location and extent of India.

Solution: Step 1: Purpose of the Map

The map in question highlights the geographical boundaries of India, showing its position on the world map and the extent of its landmass. It marks India's borders with neighboring countries, as well as its coastal regions along the Indian Ocean.

Step 2: Significance of India's Location

India is located in South Asia, bordered by Pakistan, China, Nepal, Bhutan, Bangladesh, and Myanmar. To the south, it is bounded by the Indian Ocean. The map clearly illustrates the vast and diverse geographical area India occupies, which includes a wide range of landforms, climates, and ecosystems.

The map shows the geographical extent and location of India.

Quick Tip

Quick Tip: India's vast geographical expanse includes varied landscapes like mountains, plains, deserts, and a long coastline.

2. Name the Southernmost point of India.

Correct Answer: Indira Point (in the Nicobar Islands)

Solution: Step 1: Southernmost Point of India

Indira Point is the southernmost point of India, located in the Nicobar Islands, which are part of the Union Territory of Andaman and Nicobar Islands. This point lies at a latitude of approximately 6°45 N.

Step 2: Geographical Location of Indira Point

Indira Point is situated in the southernmost part of India, marking the extreme boundary of the Indian subcontinent. It lies in the Bay of Bengal and is located just north of the equator. This point holds strategic and symbolic importance, as it represents the southernmost reach of Indian territory.

Indira Point is the southernmost point of India.

Quick Tip

Quick Tip: Remember, Indira Point marks the southernmost part of India, situated in the Nicobar Islands.

3. What is the East-West distance of India?

Correct Answer: Approximately 3000 km

Solution: Step 1: East-West Extent of India

India's east-west distance, from its easternmost point (near the Myanmar border) to its westernmost point (near the Pakistan border), is about 3,000 kilometers. This measurement covers the longitudinal extent of India's vast landmass.

Step 2: Significance of this Measurement

This east-west distance plays an important role in understanding the geographical diversity of India, which spans across various climate zones, from tropical areas in the south to temperate regions in the north. The width of India also influences its infrastructure, regional development, and connectivity.

India's east-west distance is approximately 3000 km.

Quick Tip

Quick Tip: India's vast width of about 3000 km gives it a diverse climate and geographical variation.

4. Which longitude in India is called the Indian Standard Time?

Correct Answer: 82°30 E longitude

Solution: Step 1: Indian Standard Time (IST)

The Indian Standard Time (IST) is based on the longitude of 82°30 E, which runs through the central part of India. This longitudinal line is considered the standard meridian for India, and all clocks in the country follow this time zone.

Step 2: Significance of 82°30 E Longitude

The 82°30 E longitude passes through places like Allahabad (Prayagraj) in Uttar Pradesh, and it serves as the reference for IST, which is 5 hours and 30 minutes ahead of Coordinated Universal Time (UTC+5:30). This longitude is the basis for uniform time across the whole country.

The Indian Standard Time is based on the 82°30 E longitude.

Quick Tip

Quick Tip: 82°30 E is the reference longitude for Indian Standard Time (IST), which is 5 hours 30 minutes ahead of UTC.

5. Name the Sea to the West of India.

Correct Answer: Arabian Sea

Solution: Step 1: Location of the Arabian Sea

The Arabian Sea is the body of water located to the west of India. It forms a significant part of India's maritime boundary, stretching from the Gulf of Oman in the north to the coastlines of India, Pakistan, and the Arabian Peninsula.

Step 2: Geographical Significance of the Arabian Sea

The Arabian Sea is important for India's trade and naval presence, as it provides access to global shipping routes, especially to the Middle East and Africa. It is one of the major bodies of water around India, along with the Bay of Bengal to the east.

The Sea to the West of India is the Arabian Sea.

Quick Tip

Quick Tip: The Arabian Sea lies to the west of India, with the Bay of Bengal on the east.

5. Give geographical reasons for the following $(any \ two)$:

1. Most of the Himalayan rivers are perennial in nature.

Correct Answer: Most of the Himalayan rivers are perennial in nature.

Solution: Step 1: Perennial Rivers

A perennial river is one that has water flowing throughout the year. Himalayan rivers like the Ganga, Yamuna, and Brahmaputra are considered perennial because their water flow is sustained year-round due to multiple sources.

Step 2: Sources of Water

These rivers are fed by glaciers, snowmelt, and rainfall. In summer, the melting snow and glaciers contribute to the rivers' water levels. During the monsoon, the heavy rainfall further replenishes the rivers, ensuring a consistent flow even in dry seasons.

Step 3: Importance of Perennial Rivers

The perennial nature of these rivers is crucial for agriculture, drinking water, and hydroelectric power in the regions they flow through. Their consistent flow makes them dependable and vital for human settlements along their banks.

Most of the Himalayan rivers are perennial due to their glacier and rainfall-fed nature.

Quick Tip

Quick Tip: Perennial rivers like the Ganga and Brahmaputra are sustained by both snowmelt and monsoon rainfall.

2. Tropical cyclones occur rarely in Brazil.

Correct Answer: Tropical cyclones occur rarely in Brazil.

Solution: Step 1: Tropical Cyclones and Brazil's Location

Tropical cyclones are intense storms that occur in tropical regions, typically over warm ocean waters with favorable atmospheric conditions. Brazil lies in the tropical zone but is less affected by cyclones compared to other tropical regions like the Bay of Bengal or the Pacific Ocean.

Step 2: Why Brazil Experiences Rare Cyclones

Brazil's coastline faces the South Atlantic Ocean, which has a relatively lower sea surface temperature compared to the tropical waters of the Indian and Pacific Oceans. Cyclones need warm water (around 26°C) to gain strength, and the cooler water of the South Atlantic makes it an unfavorable environment for cyclone formation.

Step 3: Coriolis Force and Cyclone Formation

The Coriolis force, which is responsible for the rotation of cyclones, is also weaker near the equator. In the South Atlantic, the weaker Coriolis force further reduces the likelihood of cyclones forming. Thus, tropical cyclones are rare in Brazil.

Tropical cyclones occur rarely in Brazil due to unfavorable sea surface temperature and weak Coriolis force.

Quick Tip

Quick Tip: Cyclones need warm waters and strong Coriolis force, which are not present in the South Atlantic near Brazil.

3. Settlements are sparse in North-Eastern Brazil.

Correct Answer: Settlements are sparse in North-Eastern Brazil.

Solution: Step 1: Semi-Arid Climate of North-Eastern Brazil

The north-eastern region of Brazil, especially the Caatinga, is a semi-arid zone characterized by low rainfall and water scarcity. This makes agriculture and human habitation difficult.

Step 2: Water Scarcity and Its Impact

The semi-arid conditions in this region result in chronic water shortages, and the land is less fertile, making it difficult for large-scale farming or permanent settlement. As a result, population density is much lower compared to more fertile regions like the Amazon or coastal plains.

Step 3: Drought-Prone Area

This region is also prone to periodic droughts, which further exacerbate the difficulties of living in this area. The lack of water and poor agricultural prospects discourage the growth of dense populations.

Settlements in North-Eastern Brazil are sparse due to water scarcity and drought-prone conditions.

Quick Tip

Quick Tip: Semi-arid zones like Caatinga make agriculture and permanent settlement difficult, leading to sparse populations.

4. The waterways are not developed in Brazil.

Correct Answer: The waterways are not developed in Brazil.

Solution: Step 1: Challenges to Waterway Development

Although Brazil has several major rivers, such as the Amazon and its tributaries, the country's waterways are not well-developed for navigation. Several factors contribute to this limitation.

Step 2: Dense Forests and Navigation Difficulties

Many of Brazil's rivers flow through dense rainforests, which make access difficult. The thick vegetation along riverbanks and the lack of proper ports or transport infrastructure hinder easy navigation.

Step 3: Seasonal Water Levels and Waterfalls

In addition, many rivers experience seasonal variations in water levels, and obstacles like waterfalls and rapids further complicate navigation. These natural barriers, along with limited infrastructure, make it challenging to use waterways for transport.

Step 4: Limited Waterway Utilization

As a result, despite Brazil's large river system, waterways are underutilized compared to other forms of transport like roads and railways.

The waterways in Brazil are not well-developed due to dense forests, seasonal water level variations, and natural obstacles.

Quick Tip

Quick Tip: Brazil's river systems are not developed for navigation due to natural obstacles like dense forests and rapids.

6. (A) With the help of given statistical data, prepare a simple bar graph and Correct Answer the following questions:

India–Literacy Rate Percentage (1981 to 2016)

Year	% of Literacy
1981	40.8
1991	48.2
2001	61.0
2011	69.3
2016	72.2

Questions:

1. What does the graph indicate?

Correct Answer: The graph shows the steady increase in India's literacy rate from 1981 to 2016.

Solution: Step 1: Understanding the Graph

The graph in question illustrates the literacy rate in India over the period from 1981 to 2016. The y-axis represents the literacy rate (in percentage), while the x-axis represents the years. The graph shows a clear, steady increase in the literacy rate, meaning that more people have been able to read and write year after year.

Step 2: Factors Contributing to the Increase

India has seen a consistent rise in literacy due to several important factors:

- 1. Government Policies: Over the years, successive governments have implemented numerous programs aimed at expanding education, including the National Literacy Mission (1988) and initiatives under the Right to Education (RTE) Act (2009), which made education a fundamental right for children aged 6–14 years.
- 2. Increased Access to Education: With the construction of more schools, the introduction of the Mid-Day Meal Scheme, and improved access to secondary and higher education, more children, especially from rural areas, have enrolled in school.
- 3. Technological Advancements: The increasing use of technology in education, including digital platforms and e-learning, has also played a role in making education more accessible, particularly in remote areas.
- 4. Awareness and Social Change: Social awareness regarding the importance of literacy has also grown. NGOs, local initiatives, and community outreach programs have played a pivotal role in promoting the value of education, especially for women and marginalized groups.

Step 3: Resulting Trends in Literacy

The steady rise shown in the graph is a direct reflection of these initiatives. As education became more accessible to a larger portion of the population, literacy rates in India increased. For instance, literacy in rural areas has grown, and female literacy has also witnessed significant progress. This steady increase represents not just a number but a long-term societal change toward better education for all sections of society.

The graph shows the steady increase in India's literacy rate from 1981 to 2016.

Quick Tip

Quick Tip: A steady rise in literacy typically indicates better education policies, infrastructure, and increased enrollment rates. Track the initiatives taken in education to understand the causes of change.

2. What was the literacy rate in the year 1991?

Correct Answer: 48.2%

Solution: Step 1: Literacy Rate in 1991

From the graph, the literacy rate in India in 1991 is marked as 48.2%. This was a significant point in India's educational progress. At that time, India was still dealing with challenges related to educational access and quality, especially in rural areas. The literacy rate in 1991 reflects the combined effects of educational policies from the previous decades, especially during the 1980s. The 48.2% literacy rate in 1991 meant that nearly half of the

population could read and write, indicating a modest but positive start in the nation's educational journey.

Step 2: The Context of India in 1991

In 1991, India was also going through significant economic and political reforms, which included opening up the economy and liberalizing sectors like telecommunications and information technology. These reforms, along with the push toward improving literacy, led to an overall rise in socio-economic development. Education continued to grow as a priority, contributing to increased awareness about literacy, especially in rural and economically backward areas.

Step 3: Significance of the 1991 Literacy Rate

The 1991 literacy rate is a crucial milestone as it shows that efforts in education were starting to bear fruit, though challenges like lack of schools, teacher shortages, and rural-urban disparities still existed. This year also set the stage for a greater emphasis on education in the following decades, ultimately leading to the higher literacy rates seen in 2001, 2011, and beyond.

The literacy rate in 1991 was 48.2%.

Quick Tip

Quick Tip: The 1991 literacy rate was a crucial milestone, showing steady growth in India's educational system since 1981. It marked a time of transition from basic educational reforms to broader, more inclusive educational policies.

3. How much was an increase in literacy rate in the decade from 1991 to 2001?

Correct Answer: 12.8% increase

Solution: Step 1: Literacy Rate in 1991 and 2001

The graph shows that in 1991, India's literacy rate was 48.2%, and by 2001, it had increased to 61.0%. The difference between these two values represents the increase in literacy during the decade from 1991 to 2001. The calculation is:

$$61.0 - 48.2 = 12.8$$

Step 2: Factors Behind the Increase

This 12.8% increase in literacy during the 1991-2001 period can be attributed to several key factors:

1. Educational Reforms: The government's increased focus on education, including the implementation of the National Programme for Education of Girls at Elementary Level

and more investments in school infrastructure, played a role.

- 2. Increased Enrollment in Schools: During this period, more children, especially girls and children from economically backward areas, were enrolled in schools. This increase in school attendance contributed significantly to the rise in literacy.
- 3. Adult Literacy Campaigns: Government campaigns aimed at improving adult literacy, especially in rural areas, also contributed to this increase.

Step 3: Result of the 12.8% Increase

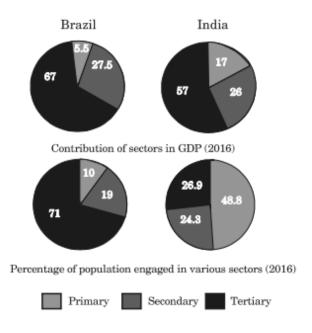
This increase of 12.8% indicates a considerable improvement in India's education system, with more people acquiring the ability to read and write. It also marks the growing importance of education in India's socio-economic development during this period.

The increase in literacy rate from 1991 to 2001 was 12.8%.

Quick Tip

Quick Tip: To calculate the decadal increase in literacy, subtract the literacy rate of the starting year from the rate of the ending year. This shows the progress made over time.

(B) Observe the following figure and Correct Answer the questions given below:



Questions:

1. Which country has a higher percentage of population engaged in primary activities?

Correct Answer: India (48.8%) compared to Brazil (10%)

Solution: Step 1: Primary Activities

Primary activities are those that involve direct extraction or use of natural resources, such as agriculture, fishing, mining, and forestry. The percentage of a population engaged in primary activities reflects the country's dependence on agriculture and natural resource extraction.

Step 2: India's Primary Sector Engagement

In India, approximately 48.8% of the population is involved in primary activities. This is significantly high, indicating that agriculture, mining, and related sectors remain a major part of India's economy, especially in rural areas where agriculture is the primary livelihood.

Step 3: Brazil's Primary Sector Engagement

Brazil, on the other hand, has only about 10% of its population engaged in primary activities. Despite its vast agricultural land and natural resources, Brazil has successfully industrialized and diversified its economy, reducing the share of its population in primary activities.

India has a significantly higher percentage of population engaged in primary activities.

Quick Tip

Quick Tip: A higher percentage of population in primary activities typically indicates a more agrarian economy, like in India.

2. In which country is the contribution of tertiary sector greater in GDP?

Correct Answer: Brazil (67%) compared to India (57%)

Solution: Step 1: Tertiary Sector Contribution

The tertiary sector, or service sector, includes industries such as retail, healthcare, finance, tourism, education, and information technology. The contribution of the tertiary sector to a country's GDP indicates how much the service industry drives the economy.

Step 2: Brazil's Tertiary Sector Contribution

Brazil's economy is highly service-oriented, with 67% of its GDP derived from the tertiary sector. This high share reflects Brazil's developed service industries like finance, retail,

and business services, which have become key economic drivers in recent decades.

Step 3: India's Tertiary Sector Contribution

India's tertiary sector contributes 57% to its GDP, which is also a significant share, driven by sectors like information technology, telecommunications, and financial services. However, Brazil's service sector is slightly more dominant compared to India's.

Brazil's contribution in the tertiary sector to GDP is higher (67%) than India's (57%).

Quick Tip

Quick Tip: A higher tertiary sector contribution to GDP generally indicates a more service-oriented, developed economy.

3. In which country is the share of secondary activities more in the GDP?

Correct Answer: Brazil

Solution: Step 1: Secondary Sector Contribution

The secondary sector includes industries such as manufacturing, construction, and energy production. The share of the secondary sector in a country's GDP indicates the extent of its industrialization.

Step 2: India's Secondary Sector Contribution

India's secondary sector contributes about 26% to its GDP. This shows the growing role of manufacturing industries, including textiles, automobiles, and consumer goods. However, India's industrial sector still faces challenges such as inadequate infrastructure and labor issues.

Step 3: Brazil's Secondary Sector Contribution

Brazil's secondary sector contributes 27.5% to its GDP, slightly higher than India's. Brazil has a more developed manufacturing sector, especially in industries like steel production, oil extraction, and automotive manufacturing. This small difference in percentage indicates that Brazil's industrial sector is slightly more advanced than India's.

Brazil's share of secondary activities in GDP is slightly higher than India's.

Quick Tip

Quick Tip: The secondary sector is key to industrial economies, and Brazil's industrial base slightly surpasses India's.

4. In which sector is the maximum percentage of population engaged in Brazil?

Correct Answer: Tertiary sector (71%)

Solution: Step 1: Sector with Maximum Employment

The tertiary sector, which includes services like retail, healthcare, IT, and education, is the sector with the highest share of employment in many modern economies. In Brazil, 71% of the population is employed in the service sector, which highlights the country's strong service-driven economy.

Step 2: Economic Structure of Brazil

Brazil's workforce is largely engaged in services, reflecting the country's economic transformation in recent decades. The service sector has become the dominant sector of employment, while primary activities (agriculture, mining) and secondary activities (manufacturing) have relatively smaller shares of the workforce.

Step 3: Implications

A large proportion of the population working in the tertiary sector signifies that Brazil's economy is increasingly shifting from agriculture and manufacturing to services. This is indicative of a developed and diversified economy.

In Brazil, the maximum percentage of the population is engaged in the tertiary sector (71%).

Quick Tip

Quick Tip: A high share of employment in the tertiary sector shows a service-based economy. Brazil's workforce reflects this shift.

5. How much more is Brazil's contribution in tertiary sector in GDP as compared to India?

Correct Answer: 10% more

Solution: Step 1: Comparing the Tertiary Sector Contributions

Brazil's contribution to GDP from the tertiary sector is 67%, while India's contribution is 57%. To find the difference between the two, we subtract India's share from Brazil's:

$$67 - 57 = 10$$

Step 2: Solution of the Difference

This 10% difference indicates that Brazil's economy is more service-oriented compared to India's. The higher share in Brazil can be attributed to the advanced nature of Brazil's service industries, including finance, telecommunications, and retail. India's service sector is also significant, but it is growing at a slightly slower pace compared to Brazil.

Brazil's contribution in the tertiary sector is 10% more than India's.

Quick Tip

Quick Tip: To calculate the difference in sectoral contribution, subtract one country's percentage from the other.

6. How much percentage of population is engaged in tertiary sector in India?

Correct Answer: 26.9%

Solution: Step 1: Tertiary Sector Employment in India

In India, approximately 26.9% of the population is engaged in the tertiary sector. This includes jobs in services like IT, finance, healthcare, retail, and education. The tertiary sector in India has grown rapidly, particularly with the rise of the IT and software services industry.

Step 2: India's Service Sector Growth

While India's primary and secondary sectors still employ a significant portion of the population, the service sector has seen rapid growth in recent decades, contributing to a large part of India's GDP and employment. The increasing use of technology, globalization, and outsourcing has led to a boom in this sector.

Approximately 26.9% of India's population is engaged in the tertiary sector.

Quick Tip

Quick Tip: A growing tertiary sector is an indicator of economic development, especially in countries like India with a burgeoning service industry.

7. Correct Answer the following questions in detail (any two):

1. What is field visit? What preparations should be done before going to a field visit?

Correct Answer: Field Visit and its Preparations

Solution: Field Visit Definition:

A field visit refers to a planned trip made by students or researchers to a specific location outside the classroom, aiming to directly observe, study, and collect data related to the geographical, social, cultural, or environmental aspects of that area. This hands-on experience helps to enhance theoretical knowledge by providing real-world insights and context. Field visits are valuable in understanding how concepts learned in theory are applied in practice. They allow students to engage directly with the environment, making learning more interactive and practical.

Preparations before a Field Visit:

- 1. Decide the Purpose: The purpose of the field visit should be well-defined. This could include studying specific topics such as river basins, industrial processes, settlement patterns, or cultural practices. A clear objective will guide the visit and make it more productive.
- 2. Selection of Place: The place chosen for the visit should align with the study objectives. It must offer relevant data or information related to the topic being researched. For example, a visit to a river basin is suitable for studying water resources and ecosystems.
- 3. Permission and Planning: It is essential to seek necessary permission from authorities, including local governments or organizations. Proper travel and stay arrangements must also be made to ensure a smooth visit.
- 4. Study Material: Prior to the visit, prepare relevant study materials such as questionnaires, observation sheets, and maps. These will help structure the visit and ensure important aspects are not overlooked.
- 5. Essential Materials: Carry essential items like a notebook, pens, a camera, measuring instruments, and first aid kits. These materials are crucial for recording observations, taking photos, and ensuring safety during the visit.
- 6. Division of Work: Assign different tasks or areas of study to various students. This helps in efficient data collection and ensures that all aspects of the study are covered comprehensively.
- 7. Safety Measures: Safety is a priority during field visits. Students should take necessary precautions regarding health, weather, and transport. This includes carrying basic medical supplies and being aware of local weather conditions and potential hazards.

Field visits are practical learning experiences that require careful preparation.

Quick Tip

Quick Tip: A successful field visit relies on clear planning and proper preparation—always have a clear purpose, divide tasks, and prioritize safety.

2. What problems did Brazil and India face after Independence?

Correct Answer: Problems Faced by Brazil and India After Independence

Solution: Problems faced by Brazil after Independence (1822):

- 1. Political Instability: Brazil faced political instability after gaining independence from Portugal in 1822. The monarchy system was unstable, and later, the shift to a republican form of government created challenges in governance. There were constant changes in political systems and conflicts regarding leadership.
- 2. Social Inequalities: Brazil inherited a deeply unequal society, marked by racial discrimination and significant economic disparities. The population faced issues related to class and race, with limited opportunities for the lower classes and Afro-Brazilian communities.
- 3. Economic Dependence: Brazil's economy was highly dependent on the export of primary products, especially coffee and sugar. This made Brazil vulnerable to international market fluctuations and limited its economic diversification.
- 4. Environmental Degradation: Large-scale deforestation for agriculture and cattle ranching led to environmental damage, especially in the Amazon rainforest. This exploitation of natural resources was done without adequate long-term planning for sustainability.
- 5. Regional Disparities: Brazil faced uneven economic development, with the richer coastal areas receiving more investment, while the interior regions remained underdeveloped and faced poverty.

Problems faced by India after Independence (1947):

- 1. Partition and Its Consequences: The partition of India in 1947 led to large-scale migration, communal riots, and the displacement of millions of people. The consequences of partition were long-lasting, creating social and political tensions.
- 2. Poverty and Unemployment: At the time of independence, India was plagued by widespread poverty, high levels of illiteracy, and unemployment. The country had limited industrialization, and most people were engaged in agriculture, which was not productive enough to support the growing population.
- 3. Poor Infrastructure: India lacked proper infrastructure, including roads, railways, and factories. This posed a major challenge for industrial growth and economic development. India needed to focus on building its infrastructure to support its growing population and economy.
- 4. Agricultural Challenges: Despite being an agricultural economy, India faced food scarcity and low agricultural productivity. This was due to outdated farming techniques and a lack of irrigation facilities in many parts of the country.
- 5. Cultural and Regional Diversity: India faced challenges in uniting its diverse population, which included people from different regions, cultures, languages, and religions. The

integration of these diverse groups into a single nation posed a challenge to national unity.

Both Brazil and India faced political, economic, and social challenges after independence.

Quick Tip

Quick Tip: Both Brazil and India had to overcome deep social inequalities and economic dependency after independence, while also tackling political instability and environmental challenges.

3. What environmental issues are faced by Brazil and India?

Correct Answer: Environmental Issues in Brazil and India

Solution: Environmental Issues in Brazil:

- 1. Deforestation in the Amazon Basin: One of the most significant environmental issues faced by Brazil is deforestation, especially in the Amazon Basin. This has been driven by agriculture, cattle ranching, and illegal logging. The deforestation of the Amazon is a global concern as it contributes to biodiversity loss and climate change.
- 2. Loss of Biodiversity: The cutting down of forests and destruction of habitats has led to a loss of biodiversity in Brazil. Many species of plants and animals are endangered due to habitat destruction.
- 3. Pollution in Urban Areas: Major cities like São Paulo and Rio de Janeiro face air and water pollution, mainly due to industrial activities, vehicle emissions, and inadequate waste management. These pollutants contribute to health problems and environmental degradation.
- 4. Soil Erosion and Degradation: Overgrazing, deforestation, and the expansion of agriculture have led to soil erosion and land degradation in some parts of Brazil. This reduces the land's fertility and hampers agricultural productivity.
- 5. Impact of Climate Change: Brazil's rainforest plays a critical role in regulating the Earth's climate. Deforestation, combined with other environmental stressors, is contributing to climate change, impacting the weather patterns and water resources in the region.

Environmental Issues in India:

- 1. Deforestation: Urbanization, agriculture, and industrialization have led to significant deforestation in India. This has resulted in loss of biodiversity, disruption of ecosystems, and soil erosion in many parts of the country.
- 2. Air Pollution: Major cities like Delhi, Mumbai, and Kolkata suffer from severe air pollution due to vehicle emissions, industrial activities, and burning of crops. This pollution has detrimental effects on public health and the environment.
- 3. Water Pollution: Rivers like the Ganga and Yamuna are highly polluted due to untreated sewage, industrial waste, and religious practices. Water pollution poses a major

threat to public health and the environment, leading to waterborne diseases.

- 4. Land Degradation and Soil Erosion: Over-cultivation, deforestation, and excessive use of chemical fertilizers have caused soil erosion and land degradation in many parts of India. This makes agriculture more difficult and threatens food security.
- 5. Overpopulation and Resource Depletion: India's large and growing population exerts immense pressure on natural resources. Overuse of water, land, and other resources is leading to their depletion and environmental degradation.

Both Brazil and India face critical environmental challenges like deforestation, pollution, and climate change.

Quick Tip

Quick Tip: Environmental issues such as deforestation, pollution, and land degradation are common challenges in both developing countries, leading to long-term sustainability concerns.