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DAILY PRACTICE QUESTIONS

BEST FOR UPSC | UP PCS EXAM

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DAILY PRACTICE QUESTIONS FROM STATIC PART

Q1. With reference to the **Industrial Revolution in Britain**, consider the following statements:

1. The early mechanisation of textile production was facilitated not merely by technological innovations but also by the availability of capital, expanding markets and access to coal and iron.
2. The Industrial Revolution immediately eliminated the importance of skilled labour in British manufacturing because mechanised production made all stages of production equally amenable to complete automation.

Which one of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (a)

Detailed Explanation:

Statement 1 is **correct**.

The Industrial Revolution cannot be explained merely as a sequence of inventions. Technological innovations such as the **spinning jenny, water frame, spinning mule and power loom** became economically transformative because they interacted with a wider set of conditions.

Britain possessed:

- substantial supplies of coal;
- expanding iron production;
- accumulated commercial and financial capital;
- expanding domestic and overseas markets;
- improving transport networks; and
- an entrepreneurial class willing to invest in mechanised production.

The textile industry became one of the earliest sectors of large-scale mechanisation because growing demand for cotton textiles created strong incentives to increase productivity.

Statement 2 is **incorrect**.

Mechanisation did not immediately eliminate skilled labour. Instead, the demand for labour changed in character. Certain traditional artisanal skills declined in importance, while new forms of specialised industrial skill emerged in machine operation, maintenance, engineering and factory management.

Moreover, industrialisation was a **gradual process**, not an instantaneous transition from hand production to fully automated factories.

This is an important historical trap: the Industrial Revolution involved the **reorganisation of labour**, rather than the immediate disappearance of skilled workers.

The factory system also altered the relationship between workers and production. Under domestic or artisanal production, workers often retained greater control over the pace and organisation of work. Factory production increasingly subjected labour to machine schedules, discipline and supervision.

Thus, the Industrial Revolution should be understood as a transformation in **technology, capital, labour organisation and markets simultaneously**, rather than simply as the invention of machines.

Q2. Which one of the following best describes the **ecological significance of ecological succession**?

- (a) It represents a permanent replacement of one ecosystem by another without any possibility of disturbance-induced reversal.
- (b) It is the predictable seasonal movement of organisms between two ecosystems in response to climatic variation.
- (c) It refers to the gradual change in the species composition and structure of an ecological community over time.
- (d) It occurs only on newly exposed surfaces where no soil or biological community previously existed.

Answer: (c)

Detailed Explanation:

Ecological succession refers to the **gradual and directional change in the composition, structure and functioning of an ecological community over time**.

It can occur in environments where a biological community already exists as well as on surfaces that were previously devoid of life.

This gives rise to the distinction between:

Primary succession — begins on a surface where a soil substrate and established biological community are essentially absent, such as newly exposed rock.

Secondary succession — occurs where a previous community has been disturbed but soil and some biological components remain, such as after fire, agricultural abandonment or certain forms of human disturbance.

Option (a) is incorrect because succession does not imply an irreversible or permanent ecological trajectory. Disturbances can interrupt, redirect or reset successional processes.

Option (b) describes **migration or seasonal movement**, not succession.

Option (d) is incorrect because succession is not restricted to newly exposed surfaces. Secondary succession is extremely important in terrestrial ecosystems.

The deeper ecological significance of succession is that ecosystems are **dynamic systems rather than static assemblages**. Species composition changes because organisms modify environmental conditions, resources become redistributed, competition changes and disturbances alter ecological trajectories.

The eventual community is also not necessarily a single universally predetermined “climax” state; contemporary ecology recognises substantial influence from disturbance regimes, environmental variability and alternative ecological pathways.

Q3. With reference to **balance of payments and external-sector transactions**, consider the following statements:

1. A current account deficit necessarily implies that a country is insolvent in its external payments position.
2. A country can finance a current account deficit through capital and financial inflows without experiencing an immediate depletion of its foreign-exchange reserves.
3. A depreciation of the domestic currency can improve the trade balance under appropriate conditions, but the outcome depends on the responsiveness of export and import quantities to changes in relative prices.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b)

Detailed Explanation:

Statements 2 and 3 are **correct**, while Statement 1 is **incorrect**.

Statement 1 is incorrect because a **current account deficit is not synonymous with external insolvency**.

A current account deficit indicates that, over a given period, a country's current external receipts are lower than its current external payments. It can arise because of a trade deficit, a deficit in services or income flows, or other current-account components.

A deficit can be financed through capital and financial inflows such as:

- foreign direct investment;
- portfolio investment;
- external borrowing; or
- other financial flows.

Therefore, a current account deficit is not automatically a crisis.

Statement 2 is correct.

If sufficient capital and financial inflows enter the economy, they can finance the current account deficit. Consequently, the central bank need not necessarily draw down foreign-exchange reserves merely because the current account is in deficit.

The composition and sustainability of financing, however, matter greatly. A deficit financed predominantly through volatile short-term capital flows can create greater vulnerability than one financed through relatively stable long-term investment.

Statement 3 is correct.

Currency depreciation makes exports relatively cheaper for foreign buyers and imports more expensive for domestic consumers. However, the actual improvement in the trade balance depends upon how strongly quantities respond to these price changes.

This is related to the **Marshall–Lerner condition**: depreciation is more likely to improve the trade balance when the sum of the absolute price elasticities of demand for exports and imports exceeds unity, subject to the relevant assumptions.

There can also be a time lag. Immediately after depreciation, the value of imports may rise because contracts and quantities do not adjust instantly, before the trade balance improves later. This is commonly associated with the **J-curve effect**.

Thus, the question distinguishes between:

Current account deficit → a flow imbalance

and

External insolvency → inability to meet external payment obligations.

They are not equivalent.

Q4. With reference to **India's foreign policy and its changing international environment**, consider the following statements:

1. Non-alignment during the Cold War necessarily implied diplomatic neutrality in every international conflict.
2. India's policy of non-alignment sought to preserve strategic autonomy rather than making India permanently equidistant from all major powers.
3. The end of the Cold War eliminated the relevance of strategic autonomy from India's foreign-policy calculations.
4. India's foreign-policy choices have historically reflected an interaction between domestic priorities, security concerns and changes in the international balance of power.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Answer: (c)

Detailed Explanation:

Statements 2 and 4 are correct, while Statements 1 and 3 are incorrect.

Statement 1 is **incorrect**.

Non-alignment should not be equated with absolute neutrality. The Non-Aligned Movement sought to provide newly independent countries with greater freedom of foreign-policy choice rather than requiring them to remain silent or neutral on every international issue.

India could take positions on international conflicts while simultaneously refusing to become a formal military member of either Cold War bloc.

Therefore:

Non-alignment $\neq$ permanent neutrality.

Statement 2 is **correct**.

A major objective of non-alignment was to preserve **strategic autonomy**. India sought freedom to determine its external policies according to its own national interests rather than automatically following either the United States-led or Soviet-led bloc.

This did not mean that India maintained identical relations with both blocs at all times. India's foreign-policy choices often reflected changing security and economic circumstances.

Statement 3 is **incorrect**.

The end of the Cold War did not eliminate strategic autonomy. Instead, the international environment changed, requiring India to redefine how autonomy could be pursued.

India subsequently developed relationships with multiple major powers while simultaneously strengthening engagement with developing countries, regional organisations and multilateral institutions.

Statement 4 is **correct**.

Indian foreign policy has been influenced by several interacting factors:

- national security;
- territorial concerns;
- economic development;
- energy requirements;
- domestic political considerations;
- technological needs;
- diaspora interests; and
- changes in the global distribution of power.

The deeper conceptual trap is to treat foreign policy as a rigid ideological doctrine. In practice, foreign policy involves **continuity of objectives combined with adaptation of instruments**.

Thus, three statements—2, 3? Wait, Statement 3 is incorrect. Therefore only Statements **2 and 4** are correct.

Correct answer: (b).

Q5. Consider the following:

Assertion (A): Countries with a highly diversified export basket may be relatively less vulnerable to a sudden deterioration in their terms of trade than countries dependent on a narrow range of primary commodities.

Reason I (R-I): A country's terms of trade can change when the prices of its exports and imports change relative to each other.

Reason II (R-II): Export diversification can reduce the extent to which a fall in the international price of one major export commodity affects the country's aggregate export earnings.

Which one of the following is correct?

- (a) Both Assertion and Reason I are correct, and Reason I is the correct explanation of the Assertion; Reason II is not correct.
- (b) Both Assertion and Reason II are correct, and Reason II is the correct explanation of the Assertion; Reason I is not correct.
- (c) Both Reason I and Reason II are correct, and both provide explanations for the Assertion.
- (d) Assertion is correct, but both Reason I and Reason II are incorrect.

Answer: (b)

Detailed Explanation:

The **Assertion is correct.**

An economy that depends heavily on one or a few commodities for export earnings can be particularly vulnerable to international price fluctuations. If the price of its principal export collapses, export revenues and purchasing power over imports can deteriorate sharply.

A diversified export structure can distribute this risk across several products and markets.

Reason I is correct as a statement.

The **terms of trade** broadly represent the relationship between export prices and import prices. A commonly used formulation is:

Terms of Trade = Export Price Index / Import Price Index × 100

If import prices rise significantly relative to export prices, the terms of trade deteriorate. Conversely, if export prices rise relative to import prices, the terms of trade improve.

However, Reason I by itself does **not provide the most direct explanation** for why export diversification reduces vulnerability.

Reason II is correct and directly explains the Assertion.

Suppose a country derives 70% of its export earnings from a single commodity. A sharp fall in that commodity's global price can substantially reduce its total export receipts.

If the country instead exports a diversified basket—say agricultural products, manufactured goods, pharmaceuticals, services and processed commodities—the fall in the price of one product may be partially offset by stable or rising prices of other exports.

Thus, diversification reduces **concentration risk**.

This is particularly relevant for commodity-dependent developing economies because primary commodities can exhibit substantial international price volatility.

The question deliberately distinguishes between a **general definition of terms of trade** and the **specific mechanism through which export diversification reduces external vulnerability**.

Reason I establishes what can cause a terms-of-trade change, whereas Reason II explains why diversification can cushion the consequences of an adverse movement in a major export price.

Hence, **Reason II is the correct explanation of the Assertion**, making **(b)** the appropriate answer.

DAILY PRACTICE QUESTIONS FROM CURRENT AFFAIRS

Q1. With reference to the **National Commission for Safai Karamcharis (NCSK)**, consider the following statements:

1. The NCSK was originally constituted under the National Commission for Safai Karamcharis Act, 1993, and its tenure has subsequently been extended by the Union Government.
2. The Commission's mandate is confined exclusively to monitoring the prohibition of manual scavenging and does not extend to broader socio-economic issues concerning Safai Karamcharis.

Which one of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (a)

Detailed Explanation:

Statement 1 is **correct**.

The **National Commission for Safai Karamcharis** was constituted under the **National Commission for Safai Karamcharis Act, 1993**. The Commission was first constituted in August 1994. Although the original statutory framework provided for a limited tenure, the Union Government has repeatedly extended the Commission's tenure. In February 2025, the Union Cabinet approved a further three-year extension beyond 31 March 2025, taking the tenure up to **31 March 2028**.

In September 2026, the Government appointed a new Chairperson, Vice-Chairperson and Members for the remaining tenure of the existing Commission.

Statement 2 is **incorrect**.

The NCSK's mandate is broader than merely monitoring manual scavenging. Its functions include recommending programmes for eliminating inequalities in the status, facilities and opportunities of Safai Karamcharis, studying and evaluating the implementation of schemes for their welfare, investigating specific grievances and matters relating to non-implementation of programmes, and making recommendations to the Central Government.

This distinction is important because **manual scavenging prohibition** and the **broader socio-economic welfare of sanitation workers** are related but conceptually distinct policy domains.

The NCSK therefore represents an institutional mechanism aimed at improving the dignity, working conditions, welfare and socio-economic position of Safai Karamcharis, in addition to addressing issues connected with hazardous sanitation work.

Q2. The term “**OPEC+**” is best understood as:

- (a) A formal treaty-based organisation consisting exclusively of OPEC member countries with identical production quotas
- (b) A broader producer-coordination framework involving OPEC members and selected non-OPEC oil-producing countries
- (c) A permanent military and economic alliance of major petroleum-exporting countries
- (d) A specialised agency of the United Nations responsible for regulating international crude-oil prices

Answer: (b)

Detailed Explanation:

OPEC+ refers to the broader producer-coordination arrangement involving the **OPEC member countries and participating non-OPEC oil-producing countries**.

The distinction between **OPEC** and **OPEC+** is important.

OPEC is an intergovernmental organisation with a formal institutional structure. OPEC+ is a broader coordination framework associated with the **Declaration of Cooperation**, through which participating producers coordinate production policies in response to global oil-market conditions.

The arrangement includes major non-OPEC producers such as **Russia and Kazakhstan**, among others.

A recent example illustrates the flexible character of this arrangement. On **6 September 2026**, seven OPEC+ countries—Saudi Arabia, Russia, Iraq, Kuwait, Kazakhstan, Algeria and Oman—met virtually to review market conditions. They decided to maintain their September 2026 required production for October 2026 and reaffirmed their commitment to market stability and conformity with the Declaration of Cooperation.

Thus, OPEC+ should not be conceptualised as a new international organisation with an independent permanent institutional identity equivalent to OPEC.

The UPSC trap is the phrase “**OPEC+**” itself: the “+” signifies participation by **non-OPEC producers**, making the framework broader than OPEC.

Q3. With reference to **e-FAST India** and the recent initiatives for decarbonising India's freight sector, consider the following statements:

1. e-FAST India is a NITI Aayog initiative focused on accelerating the transition towards sustainable freight transport.
2. The Platform for Aggregating Clean Transport (PACT) seeks to aggregate freight demand to facilitate scaled deployment of zero-emission trucks.
3. The Zero Emission Truck (ZET) Marketplace is intended primarily to establish a mandatory regulatory quota requiring freight operators to replace a fixed proportion of diesel trucks every year.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b)

Detailed Explanation:

Statements 1 and 2 are **correct**, while Statement 3 is **incorrect**.

Statement 1 is correct.

e-FAST India (Electric Freight Accelerator for Sustainable Transport) is a NITI Aayog initiative associated with accelerating the transition towards sustainable freight transport. It focuses particularly on the difficult challenge of decarbonising India's freight sector.

Statement 2 is correct.

At the fifth e-FAST India Summit in September 2026, NITI Aayog launched the **Platform for Aggregating Clean Transport (PACT)**. The platform is intended to aggregate freight demand through continuous engagement with ecosystem stakeholders, thereby supporting scaled deployment of **zero-emission trucks (ZETs)** and strengthening their commercial case.

This is analytically important because freight electrification faces a coordination problem. Vehicle manufacturers, fleet operators, financiers and charging-infrastructure providers need sufficient confidence in one another's commitments. Aggregating demand can potentially reduce this coordination barrier.

Statement 3 is incorrect.

The **ZET Marketplace** is designed as a platform to facilitate business, financing and charging partnerships around zero-emission trucks. It is not a mandatory regulatory quota imposed on freight operators requiring annual replacement of a prescribed share of diesel vehicles.

The conceptual distinction is:

PACT → aggregation of freight demand and ecosystem coordination.

ZET Marketplace → business, finance and charging partnerships.

Neither is equivalent to a mandatory vehicle-replacement regulation.

The initiative therefore represents an attempt to move electric freight from a technology-demonstration stage towards **commercial-scale deployment**.

Q4. With reference to the **Carbon Credit Trading Scheme (CCTS) of India**, consider the following statements:

1. Under the compliance mechanism, obligated entities are required to meet prescribed greenhouse-gas emission-intensity targets rather than merely a fixed absolute emissions cap.
2. An entity that performs better than its prescribed emission-intensity target may become eligible for Carbon Credit Certificates, while an entity falling short may need to surrender or purchase certificates.

3. The offset mechanism is designed exclusively for entities already notified as obligated entities under the compliance mechanism.
4. The Bureau of Energy Efficiency has a role in identifying sectors and recommending greenhouse-gas emission-intensity targets under the compliance mechanism.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Answer: (c)

Detailed Explanation:

Statements 1, 2 and 4 are **correct**, while Statement 3 is **incorrect**.

Statement 1 is correct.

The CCTS compliance mechanism is based on **greenhouse-gas emission intensity**, expressed in terms such as tonnes of CO₂ equivalent per unit of output. This is conceptually different from imposing an identical absolute emissions ceiling on every participating entity.

This distinction is important for a developing economy because production may continue to expand even while the emission intensity of production declines.

Statement 2 is correct.

An obligated entity that reduces its GHG emission intensity below its prescribed target can become eligible for **Carbon Credit Certificates (CCCs)**. An entity failing to achieve the target is required to surrender the requisite certificates or obtain additional certificates, including through purchase.

Thus, the mechanism creates a market-linked incentive for reducing emissions intensity.

Statement 3 is incorrect.

The **offset mechanism** is intended for **non-obligated entities** undertaking eligible projects involving greenhouse-gas emission reduction, removal or avoidance. Such projects may generate Carbon Credit Certificates subject to the prescribed eligibility, validation and verification requirements.

This creates a fundamental distinction:

- **Compliance mechanism** → **obligated entities and mandatory emission-intensity targets.**
- **Offset mechanism** → **non-obligated entities and voluntary project-based mitigation.**

Statement 4 is correct.

Under the compliance framework, the **Bureau of Energy Efficiency (BEE)** identifies sectors and reduction potential and recommends emission-intensity targets, while the target-setting process also involves the Ministry of Power and Ministry of Environment, Forest and Climate Change.

Therefore, **three statements are correct**.

Q5. With reference to the El Alamein International Airshow 2026, consider the following statements:

1. It is positioned as a regional platform connecting stakeholders in aerospace, defence and space sectors across Africa and the Middle East.
2. The 2026 edition was held at El Alamein International Airport and constituted the second edition of the event.
3. The event was exclusively a military exercise conducted by the Egyptian Air Force and did not include civil aviation, space or industry participation.
4. India was among the countries whose teams participated in the aerial displays associated with the 2026 event.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Answer: (c)

Detailed Explanation:

Statements 1, 2 and 4 are **correct**, while Statement 3 is **incorrect**.

Statement 1 is correct.

The **El Alamein International Airshow (EIAS)** is positioned as a regional platform connecting stakeholders across the **aerospace, defence and space sectors**, particularly with an emphasis on Africa and the Middle East. The event includes industry exhibitions, aircraft displays, conferences and opportunities for commercial and strategic engagement.

Statement 2 is correct.

The 2026 edition was the **second edition** of the event and was held at **El Alamein International Airport** from **8–10 September 2026**, with the Aerospace Future Technology Symposium taking place on 7 September.

Statement 3 is incorrect.

EIAS 2026 was not merely a military exercise. It brought together government and military representatives, civil aviation stakeholders, space agencies, manufacturers, suppliers and other industry participants. The Egyptian Space Agency also participated, presenting capabilities related to satellite development, integration, operations and the use of space data.

This distinction between an **airshow/exhibition** and a **military exercise** is important.

Statement 4 is correct.

The official Egyptian Presidency reported aerial displays involving the Egyptian Air Force and teams from **Russia, Spain, Türkiye, Saudi Arabia, the UAE, France and India**.

Thus, the event had both a defence dimension and a broader **aerospace–space–commercial aviation ecosystem** dimension.

Q6. Consider the following geographical description:

It is a small, landlocked country in Western Europe. It lies between **Belgium, Germany and France**, and its territory includes the hilly and forested **Oesling** region in the north and the more densely settled **Guttland** region in the centre and south.

The country described above is:

- (a) Luxembourg
- (b) Liechtenstein
- (c) Switzerland
- (d) Slovenia

Answer: (a)

Detailed Explanation:

The correct answer is **Luxembourg**.

Luxembourg is a small **landlocked Western European country** bordered by **Belgium to the west and north, Germany to the east, and France to the south**. Its area is approximately 2,586 km².

Its territory is broadly divided into two geographical regions:

- **Oesling (Éislek)** in the north, forming part of the Ardennes and characterised by wooded landscapes, plateaus and valleys.
- **Guttland** in central and southern Luxembourg, which is comparatively more densely populated and includes Luxembourg City.

The **Moselle** forms part of Luxembourg's eastern boundary with Germany, while the **Our** also contributes to the natural border system.

The other options are geographically distinct:

- **Liechtenstein** → landlocked Alpine state between Switzerland and Austria.
- **Switzerland** → landlocked Alpine country bordered by France, Germany, Austria, Liechtenstein and Italy.
- **Slovenia** → Central/Southeastern European country with a short Adriatic coastline and borders with Italy, Austria, Hungary and Croatia.

Hence, the combination of **Western Europe + landlocked + Belgium + Germany + France + Oesling + Guttland** uniquely identifies **Luxembourg**.

DAILY PRACTICE QUESTIONS FOR MAINS ANSWER WRITING PRACTICE

Q1. “Human geography is concerned not merely with where people live, but with the spatial processes through which population, resources, settlements and economic activities interact.” Discuss the significance of a human-geographical approach in understanding regional disparities in India.

Sample Answer

Human geography examines the relationship between human societies and the spatial environment in which they operate. Unlike a purely demographic description, it seeks to understand **why population, settlements, economic activities and social institutions are distributed unevenly across space**. This perspective is particularly useful for explaining regional disparities in India.

India exhibits considerable spatial variation in population density, urbanisation, agricultural productivity, industrialisation, infrastructure and human-development outcomes. These disparities are the outcome of an interaction between **physical conditions, historical processes, economic structures and institutional factors**.

Physical-geographical factors

The distribution of population and economic activity is partly influenced by physical geography.

The fertile alluvial plains of the Ganga-Brahmaputra system support dense populations because of favourable agricultural conditions and water availability. In contrast, the Thar Desert, high Himalayan areas and parts of the northeastern hills have relatively lower population densities because of constraints imposed by terrain, climate and accessibility.

However, physical geography alone cannot explain contemporary disparities.

Historical factors

Historical processes have significantly influenced regional development.

Colonial-era infrastructure, ports, commercial centres and administrative capitals created spatially concentrated economic advantages. Cities such as Mumbai, Kolkata and Chennai developed as major nodes of commerce and transport, creating path-dependent development.

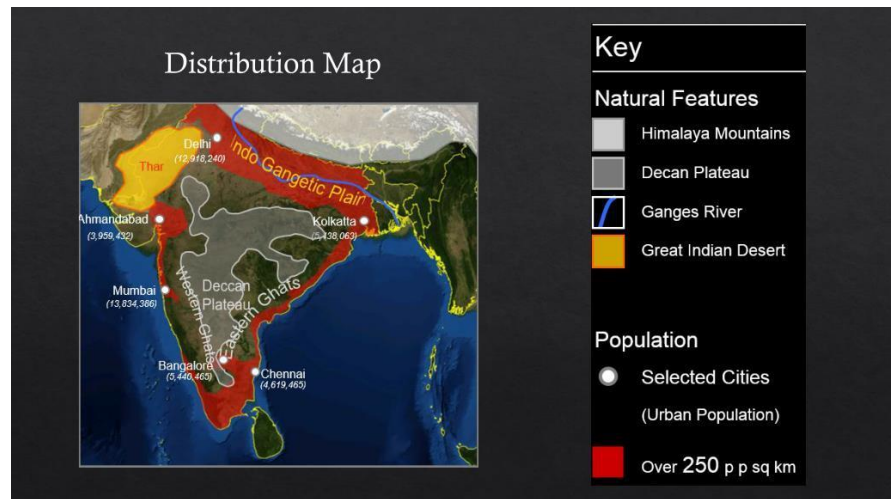
Similarly, regions with historically developed irrigation systems, markets and agricultural institutions acquired cumulative advantages.

Economic factors

Industrialisation generates agglomeration economies. Firms benefit from proximity to:

- skilled labour;
- suppliers;
- transport infrastructure;
- financial institutions;
- consumers; and
- technological networks.

Consequently, industrial and service activities tend to cluster around particular urban regions rather than being distributed uniformly.



This produces a **cumulative causation effect**: developed regions attract investment, which creates employment, which attracts labour and further investment.

Infrastructure and connectivity

Transport and digital connectivity have become increasingly important determinants of regional development.

A region with highways, railways, ports, airports, reliable electricity and broadband connectivity has greater access to markets and investment.

Conversely, infrastructural deficits can reinforce geographical isolation even where natural resources are abundant.

Human capital

Regional disparities are also shaped by differences in education, healthcare and skill development.

A highly educated workforce can attract technology-intensive industries, while inadequate human capital can constrain diversification even where physical infrastructure exists.

Environmental dimension

Development cannot be separated from environmental conditions. Regions dependent upon fragile ecosystems may face constraints arising from water scarcity, land degradation, floods, droughts or climate change.

Thus, regional planning must recognise **ecological carrying capacity** rather than treating all territories as interchangeable units.

Policy implications

A human-geographical perspective suggests that regional inequality cannot be addressed simply through uniform national policies.

Policy should combine:

- infrastructure development;
- human-capital investment;

- connectivity;
- decentralised planning;
- region-specific industrial strategies;
- sustainable resource management; and
- stronger rural–urban linkages.

The objective should not necessarily be to make every region economically identical. Instead, development planning should expand **capabilities and opportunities across regions while respecting their geographical characteristics**.

Conclusion

Human geography demonstrates that regional disparities are produced through an interaction of **environment, history, institutions, infrastructure, markets and human capital**. Understanding these spatial relationships enables policymakers to move beyond one-size-fits-all development strategies towards geographically differentiated and sustainable regional planning.

Q2. “IORA represents an attempt to transform the Indian Ocean from a geographical space of interaction into a framework for institutionalised regional cooperation.” Examine the significance and limitations of the Indian Ocean Rim Association for India's regional diplomacy.

Sample Answer

The **Indian Ocean Rim Association (IORA)** is a regional organisation established in 1997 to promote economic cooperation and address shared challenges among countries of the Indian Ocean region. It has evolved beyond its initial economic orientation to include maritime security, disaster management, fisheries, tourism, academic cooperation and other areas.

IORA currently has **23 member states and 12 dialogue partners**. India assumed the chair of IORA for the 2025–27 period after Sri Lanka.

For India, IORA has significance because the Indian Ocean is simultaneously a strategic, economic, ecological and geopolitical space.

Strategic significance

Approximately significant proportions of global maritime commerce and energy flows pass through the Indian Ocean. Consequently, maritime security, freedom of navigation, piracy, illegal fishing, maritime terrorism and disaster response are common regional concerns.

IORA provides a multilateral platform through which India can promote cooperative approaches to these challenges rather than relying exclusively on bilateral arrangements.

Economic significance

The Indian Ocean connects major production and consumption centres in Asia, Africa and the Middle East.

IORA can facilitate cooperation in:

- trade and investment;

- maritime transport;
- fisheries;
- tourism;
- blue economy;
- technology; and
- economic resilience.

For India, this complements its broader interest in strengthening commercial and developmental partnerships with African and Indian Ocean countries.

Blue economy

The Indian Ocean possesses considerable marine resources, but their exploitation requires sustainability.

IORA's emphasis on fisheries, marine resources and the blue economy provides an institutional platform for balancing economic utilisation with ecological sustainability.

Disaster management

Many Indian Ocean countries are vulnerable to cyclones, tsunamis, coastal flooding and other disasters. India has developed substantial capabilities in early warning and disaster response.

IORA can facilitate:

- information sharing;
- early-warning cooperation;
- capacity building;
- humanitarian assistance; and
- disaster-response coordination.

India's diplomatic significance

IORA complements India's wider regional approach, including **SAGAR—Security and Growth for All in the Region**.

It enables India to engage simultaneously with countries of very different political and economic systems. The organisation therefore provides a relatively inclusive platform for India's Indian Ocean diplomacy.

Limitations

However, IORA's potential should not be exaggerated.

First, its membership is highly diverse. Member states have different economic structures, strategic priorities and foreign-policy orientations.

Second, IORA decisions are based on **consensus**, and commitments are undertaken voluntarily. This facilitates inclusiveness but can limit the speed and depth of implementation.

Third, regional security cooperation remains complicated by major-power competition, especially because several external powers have substantial strategic and economic interests in the Indian Ocean.

Fourth, institutional capacity and financing remain constraints compared with more deeply integrated regional organisations.

Way forward

India can strengthen IORA through:

- maritime domain awareness;
- blue-economy partnerships;
- disaster-resilience networks;
- capacity-building programmes;
- sustainable fisheries;
- digital connectivity;
- port and logistics cooperation; and
- greater private-sector engagement.

India should also avoid turning IORA into an explicitly bloc-oriented geopolitical mechanism. Its effectiveness is more likely to increase through **issue-based cooperation and inclusive regionalism**.

Conclusion

IORA's significance lies less in creating a supranational regional structure and more in building a **habit of cooperation among diverse Indian Ocean states**. For India, it offers an important platform through which maritime security, economic connectivity, development and ecological concerns can be addressed collectively. Its success, however, will depend upon converting broad regional consensus into measurable and sustained cooperation.

Q3. “The apparent conflict between development and environmental protection often arises from treating natural resources as externalities rather than as productive assets with ecological limits.” Discuss. How can India pursue development while maintaining ecological sustainability?

Sample Answer

Development and environmental protection are often presented as competing objectives. Such a binary, however, is conceptually inadequate. Economic activity depends fundamentally upon **land, water, energy, biodiversity, minerals and ecosystem services**. Environmental degradation can therefore undermine the very foundations of long-term development.

The real challenge is not choosing between development and environment but determining **the scale, location, technology and distributional consequences of development**.

Why the conflict emerges

Infrastructure, mining, industrialisation and urbanisation can create employment and raise incomes. However, these activities can also generate:

- air and water pollution;
- habitat fragmentation;
- deforestation;
- groundwater depletion;
- biodiversity loss;
- waste accumulation; and
- greenhouse-gas emissions.

The problem becomes particularly severe when environmental costs are not reflected in market prices.

For example, a factory may appear economically profitable while part of its real cost is imposed on society through polluted water or deteriorating public health. Such costs are **negative externalities**.

Development cannot ignore ecological limits

Natural resources are not infinitely substitutable.

A forest provides timber, but it also provides:

- carbon sequestration;
- soil protection;
- water regulation;
- biodiversity habitat; and
- livelihood support.

If these ecosystem services are ignored in project appraisal, the apparent economic return may be substantially overstated.

India's development challenge

India requires rapid infrastructure expansion, employment generation and energy access. At the same time, it faces significant climate and ecological vulnerabilities.

A sustainable development strategy should therefore involve several components.

1. Decoupling growth from environmental degradation

Technological innovation can enable greater output with lower resource and emission intensity.

This includes:

- renewable energy;



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- energy-efficient industry;
- electric mobility;
- green hydrogen;
- circular-economy approaches; and
- low-carbon manufacturing.

2. Environmental impact assessment

Environmental appraisal should not be treated as merely a procedural clearance requirement. It should evaluate cumulative impacts, carrying capacity, alternatives and ecological risks.

Strategic environmental assessment can be particularly useful where multiple projects affect the same ecosystem.

3. Natural capital accounting

National and state planning should increasingly recognise the economic value of ecosystem services.

A wetland should not be valued only according to its potential conversion value. Its flood-buffering, groundwater-recharge and biodiversity functions also have economic significance.

4. Just transition

Environmental policy can impose concentrated costs on particular communities. Coal-dependent workers and regions, for example, may face employment disruptions during decarbonisation.

Therefore, transition policies should include:

- reskilling;
- alternative employment;
- social protection; and
- regional economic diversification.

5. Community participation

Local communities possess knowledge regarding forests, water and land-use practices. Their participation can improve both conservation outcomes and legitimacy.

6. Polluter-pays and precautionary principles

Environmental governance should ensure that those generating environmental damage bear appropriate costs. At the same time, uncertainty should not become an excuse for ignoring potentially irreversible ecological harm.

Conclusion

The development–environment debate should move beyond the false choice between “growth” and “conservation”. Sustainable development requires recognising that **environmental assets are components of national wealth**. India therefore needs development that is resource-efficient, technologically innovative, socially just and ecologically sensitive. The objective should be to maximise **long-term human welfare rather than short-term economic output alone**.

Q4. “Ethical leadership in public administration is less about possessing perfect moral certainty and more about creating institutions in which power remains accountable.” Discuss.

Sample Answer

Public administration involves the exercise of significant coercive, regulatory and distributive power. Civil servants decide how public resources are allocated, regulations are implemented and citizens interact with the state. Ethical leadership is therefore essential not merely for individual morality but for maintaining **institutional legitimacy and public trust**.

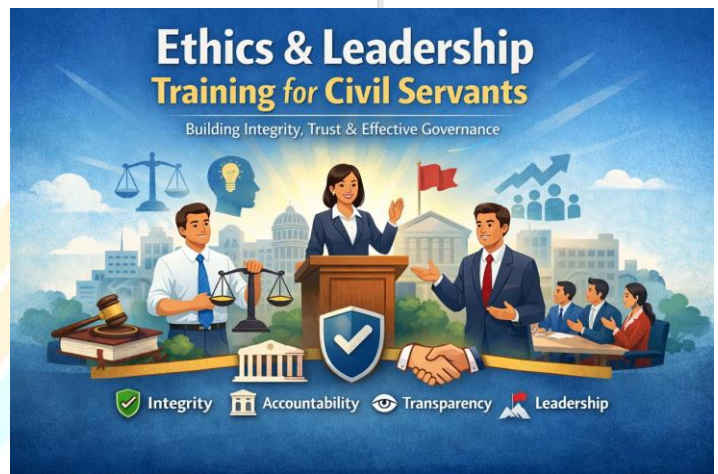
Ethical leadership should not be understood as the ability of an administrator to possess perfect moral certainty. Administrative decisions frequently involve competing values and incomplete information. What matters is whether the exercise of authority remains **lawful, reasoned, transparent and accountable**.

Ethical leadership and integrity

Integrity implies consistency between an individual's values, official responsibilities and conduct.

An ethical administrator should resist:

- corruption;
- nepotism;
- conflicts of interest;
- discrimination;
- political favouritism; and
- misuse of public resources.



However, integrity extends beyond personal honesty. An officer can be personally honest yet preside over an institution with opaque and arbitrary procedures.

Hence, ethical leadership must have an institutional dimension.

Accountability as a constraint on power

Power becomes ethically problematic when it cannot be questioned.

Institutional accountability can operate through:

- legislative oversight;
- judicial review;
- audits;
- transparency mechanisms;
- grievance redressal;
- social audits;

- departmental review; and
- independent regulatory institutions.

These mechanisms do not imply distrust of every public servant. Rather, they recognise that **institutions should not depend exclusively upon individual virtue.**

Ethical dilemma and reasoned discretion

Consider an administrator faced with an emergency requiring rapid expenditure of public money.

Strict adherence to ordinary procedures may delay essential relief, while complete procedural disregard can create opportunities for corruption.

Ethical leadership requires balancing:

- legality;
- urgency;
- public interest;
- accountability; and
- proportionality.

The officer should act within legally permitted emergency provisions and document the reasons for the decision.

Transparency

Transparency helps convert administrative discretion into accountable discretion.

A decision that can be explained publicly is less likely to be based on arbitrary considerations. However, transparency must also respect legitimate requirements of confidentiality, privacy and national security.

Thus, ethical governance is not equivalent to indiscriminate disclosure.

Constitutional morality

Indian public administration must ultimately operate within constitutional values.

Equality, dignity, justice, liberty and fraternity provide a broader ethical framework for evaluating administrative decisions.

For example, an apparently neutral policy can produce discriminatory outcomes for vulnerable groups. Ethical leadership requires officials to recognise such consequences rather than relying exclusively upon formal compliance.

Institutional culture

Leaders influence organisational culture through their behaviour.

If senior officers tolerate minor corruption, favouritism or procedural manipulation, such practices can become normalised. Conversely, transparent decision-making, fair personnel management and protection of whistle-blowers can strengthen ethical culture.

Conclusion

Ethical leadership is therefore a combination of **personal integrity and institutional accountability**. The objective is not to create administrators who claim infallible moral judgment, but institutions in which decisions are reasoned, reviewable and oriented towards constitutional values and public interest. In this sense, ethical leadership does not merely constrain power—it makes the exercise of public power **legitimate and trustworthy**.

Current Affairs – Science & Technology

Q5. “India’s emerging space-sector model seeks to separate the roles of research, regulation and commercialisation without weakening the strategic role of the state.” Examine the rationale, opportunities and challenges of this model.

Sample Answer

India's space sector is undergoing a structural transformation in which private enterprises and start-ups are being given greater opportunities to participate in activities traditionally dominated by government institutions. Importantly, this process is being presented as **ecosystem expansion rather than privatisation of ISRO**.

ISRO itself clarified in September 2026 that it will remain India's principal institution for advanced space research and technology development, strategic and national missions, space science and exploration, while industry is expected to scale mature technologies and commercial activities.

Rationale for the new model

Historically, ISRO performed a broad range of functions—from advanced research to manufacturing operational systems. As India's space activities expand, performing all routine manufacturing and commercial activities within the public system can constrain the scientific organisation's capacity.

The new approach therefore seeks greater **functional specialisation**.

ISRO can concentrate on:

- frontier research;
- advanced propulsion;
- planetary exploration;
- human spaceflight;
- strategic missions; and
- next-generation technologies.

Meanwhile, industry can scale mature technologies into commercial production.

Institutional architecture



Three institutions have particularly important roles.

ISRO remains the principal technological and scientific institution.

IN-SPACe functions as an autonomous nodal agency for promoting, authorising and supervising private space activities. It also facilitates access to ISRO infrastructure and regulates activities undertaken by non-government entities.

NSIL (NewSpace India Limited) serves as the commercial arm involved in commercialisation of publicly funded technologies, launch services and satellite services.

Thus, the model can be represented as:

Research & advanced technology → ISRO

Authorisation & promotion → IN-SPACe

Commercialisation & market aggregation → NSIL

This separation can reduce institutional conflicts between being a technology developer, regulator and commercial operator.

Opportunities

1. Capital mobilisation

Private participation brings additional capital beyond government budgetary resources. Government data indicate cumulative private investment in the Indian space sector had reached **USD 618.5 million by March 31, 2026**.

2. Faster innovation

Start-ups can often experiment with new technologies and business models with greater organisational flexibility.

3. Manufacturing scale

Once mature technologies are transferred to industry, private firms can manufacture systems at larger commercial scale.

4. Global market access

Private firms can develop commercially competitive launch, satellite, Earth-observation and downstream space applications.

5. Public-sector specialisation

ISRO scientists and engineers can devote greater attention to technologically complex missions rather than routine production.

The model is already extending into new areas. In 2026, the government announced a PPP framework under which non-government entities can design, build, own and operate Earth-observation satellite constellations.

Challenges

The transition is not without risks.

First, regulatory capacity must keep pace with industry growth.

As more private actors undertake launches and satellite operations, issues involving safety, spectrum, orbital debris, liability and national security become increasingly important.

Second, access to finance remains a challenge.

Space activities involve long development cycles and substantial technological risks. Early-stage venture funding alone may not sustain companies through commercialisation.

Third, technology transfer requires safeguards.

Sensitive technologies cannot be treated identically to routine commercial technologies. Intellectual-property protection and strategic-security considerations must be integrated into technology-transfer arrangements.

Fourth, state capacity remains essential.

Private participation does not eliminate the need for public investment in fundamental research, strategic missions, testing infrastructure and long-term technological capabilities.

Way forward

India should strengthen:

- predictable regulatory frameworks;
- space insurance and liability mechanisms;
- technology-transfer procedures;
- long-term government procurement;
- access to testing infrastructure;
- venture and growth capital;
- skilled manpower; and
- cybersecurity and orbital-debris governance.

The objective should be to create a **competitive private ecosystem without weakening public strategic capabilities**.

Conclusion

India's emerging space model is best understood as a **division of functions rather than withdrawal of the state**. ISRO's continued focus on frontier and strategic capabilities, IN-SPACe's regulatory role and NSIL's commercialisation role can collectively expand India's space ecosystem.

The central policy challenge is to achieve the right balance: **private capital and innovation for scale, public institutions for strategic direction and frontier research, and robust regulation for safety, security and national interest**.

