

CUET 2026 Geography May 24 Shift 2

Question Paper with Solutions

Conducted by National Testing Agency (NTA)



General Instructions

- (i) The examination was conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.
- (iii) The total number of questions are 50.
- (iv) Duration of the exam is 1 hour (60 minutes).

1. Which of the following is a push factor for migration?

- (A) Unemployment
- (B) Better job opportunities
- (C) Peace and stability
- (D) Pleasant climate

Correct Answer: (A) Unemployment

Solution:

Concept:

Human migration involves the movement of individuals or groups from an area of origin to a destination area.

This spatial redistribution of people is driven by two broad categories of driving forces, termed push factors and pull factors.

Push factors are adverse socioeconomic, political, or environmental conditions that compel or force individuals to leave their native place of residence.

Conversely, pull factors represent favorable, attractive attributes at a prospective destination

that draw people toward that specific locality.

Step 1: Analyzing Push and Pull Factors:

Push factors make the place of origin seem less attractive due to distress, deprivation, or lack of essential opportunities.

Typical push factors include severe unemployment, poverty, poor living conditions, political turmoil, war, local conflicts, and natural disasters.

Pull factors attract migrants to a place of destination and encompass enhanced employment prospects, higher wages, safety, peace, and better civic infrastructure.

Step 2: Evaluating the Given Options:

Unemployment creates severe economic distress, making survival difficult in the native habitat and compelling workers to seek sustenance elsewhere.

Thus, unemployment acts unambiguously as a push factor.

Better job opportunities represent an economic incentive that attracts individuals, classifying it as an attractive pull factor.

Peace and stability provide physical safety and social security, functioning as an attractive pull factor.

A pleasant climate offers comfortable environmental living conditions, which also acts as an environmental pull factor.

Final Answer:

Therefore, among the given alternatives, Unemployment is the only push factor for migration.

Quick Tip: Remember: Push factors repel people from their place of origin (e.g., lack of jobs, disasters, conflict).

Pull factors attract people to a new destination (e.g., higher wages, good healthcare, peaceful environment).

2. The Marxian theory was applied by _____ to explain social inequality.

- (A) Positivist School of Thought
- (B) Humanistic School of Thought
- (C) Radical School of Thought
- (D) Behavioural School of Thought

Correct Answer: (C) Radical School of Thought

Solution:

Concept:

During the post-1970s period, human geography underwent significant philosophical diversification in reaction to quantitative and mechanistic spatial models.

Scholars sought deeper explanations for persistent socioeconomic disparities, leading to the rise of three prominent contemporary schools of thought.

These three schools include the Welfare or Humanistic school, the Radical school, and the Behavioural school.

Step 1: Understanding the Radical School of Thought:

The Radical School of Thought emerged strongly in the early 1970s to address structural inequalities, deprivation, and social injustice.

This intellectual movement explicitly employed Marxian social and economic theory to explain the root causes of poverty, unequal resource allocation, and social marginalization.

Marxian geographical analysis posits that spatial inequalities and environmental degradations are inherent contradictions of the capitalist mode of production.

Step 2: Examination of Alternative Schools:

The Positivist School of Thought relied on empirical observation, quantitative methods, and value-free geometric models of spatial science.

The Humanistic School placed central emphasis on human agency, subjective lived experience, consciousness, and sense of place.

The Behavioural School focused on individual psychological processes, cognitive mapping, and perceived space rather than structural economic power.

Final Answer:

Therefore, the Marxian theory was applied by the Radical School of Thought to explain social inequality.

Quick Tip: Associate key geographical paradigms directly:

Radical School → Marxian theory (poverty, inequality, capitalism).

Humanistic School → Human agency, lived experience, welfare.

Behavioural School → Environmental perception, cognitive space.

3. Ankleshwar oilfield is located in which state?

- (A) Assam
- (B) Rajasthan
- (C) Andhra Pradesh
- (D) Gujarat

Correct Answer: (D) Gujarat

Solution:

Concept:

Petroleum and natural gas resources in India occur in sedimentary basins associated with tertiary rock formations.

Major onshore hydrocarbon production is concentrated across specific geographic regions including the Western Coast basin, the Northeastern region, and Western Rajasthan.

The state of Gujarat represents one of India's most prominent onshore and offshore petroleum-producing provinces.

Step 1: Geographic Distribution of Gujarat Oilfields:

The Cambay Basin in Gujarat contains extensive reservoirs of high-grade crude oil and associated natural gas.

Ankleshwar, located in the Bharuch district of Gujarat, is one of the oldest and most prolific

commercial oilfields discovered by the Oil and Natural Gas Corporation (ONGC).

Discovered in 1958, Ankleshwar began major commercial crude oil production in the early 1960s and is famously referred to as the "Fountain of Prosperity".

Step 2: Evaluation of Alternative States:

Assam contains major northeastern oilfields such as Digboi, Naharkatiya, and Moran-Hugrijan.

Rajasthan has significant major onshore oilfields located in the Barmer-Sanchore basin, such as Mangala, Bhagyam, and Aishwarya.

Andhra Pradesh contains hydrocarbon reserves along the Krishna-Godavari (KG) offshore and coastal onshore basin.

Final Answer:

Consequently, the Ankleshwar oilfield is situated in the state of Gujarat.

Quick Tip: Key Indian oilfields by state:

Gujarat: Ankleshwar, Kalol, Mehsana, Nawagam, Lunej.

Assam: Digboi (oldest in India), Naharkatiya, Moran-Hugrijan.

Rajasthan: Mangala, Bhagyam, Aishwarya (Barmer district).

4. Which of the following is NOT a component of population change?

- (A) Sex Ratio
- (B) Births
- (C) Death
- (D) Migration

Correct Answer: (A) Sex Ratio

Solution:

Concept:

Demographic change refers to the quantitative modification in the size, density, and spatial distribution of a human population over time.

The demographic balancing equation explicitly identifies the fundamental processes that govern numerical additions and subtractions to any given population.

These fundamental processes are termed the components of population change.

Step 1: Identifying the Components of Population Change:

There are precisely three components of population change:

1. Births (measured via crude birth rate or fertility), which add individuals to the population.
2. Deaths (measured via crude death rate or mortality), which remove individuals from the population.
3. Migration (net migration comprising immigration and emigration), which redistributes individuals geographically.

Natural growth is determined by the difference between births and deaths, whereas actual growth accounts for net migration.

Step 2: Analysis of the Term Sex Ratio:

The sex ratio is a structural indicator of population composition, defined as the ratio between the number of males and females in a population.

Sex ratio describes the demographic structure or characteristics of an existing population at a single snapshot in time.

It does not itself represent an independent dynamic process of numerical population growth or decline.

Final Answer:

Hence, Sex Ratio is NOT a component of population change.

Quick Tip: Demographic components of change = Births + Deaths + Migration.

Characteristics such as Sex Ratio, Age Structure, and Literacy rate represent population composition, not dynamic components of change.

5. Which of the following approach was initially proposed by International Labour Organization?

- (A) Income Approach
- (B) Capability Approach
- (C) Welfare Approach
- (D) Basic Need Approach

Correct Answer: (D) Basic Need Approach

Solution:

Concept:

Human development assesses the expansion of human freedoms, capabilities, and overall quality of life rather than solely evaluating economic output.

Over the decades, international development literature has recognized several distinct philosophical approaches to measuring and conceptualizing human development.

These include the Income Approach, the Welfare Approach, the Basic Needs Approach, and the Capability Approach.

Step 1: The Basic Needs Approach by the ILO:

The Basic Needs Approach was initially formulated and championed by the International Labour Organization (ILO) during the World Employment Conference in 1976.

This framework shifts the development debate away from aggregate economic indicators toward the direct satisfaction of essential physical and social human requirements.

The ILO explicitly highlighted six vital basic needs: health, education, food, water supply, sanitation, and housing.

Under this approach, the question of human choice is not emphasized; the primary focus is entirely on fulfilling minimum essential material needs.

Step 2: Other Development Approaches:

The Income Approach is the oldest paradigm, linking human development directly to the level of income.

The Welfare Approach views human beings as beneficiaries of government development

expenditure on health, education, and amenities.

The Capability Approach was developed by Nobel laureate Prof. Amartya Sen, emphasizing the building of human capabilities to expand freedom of choice.

Final Answer:

Therefore, the approach initially proposed by the International Labour Organization is the Basic Need Approach.

Quick Tip: Match Human Development Approaches with their originators/concepts:

Basic Needs Approach → International Labour Organization (ILO).

Capability Approach → Prof. Amartya Sen.

Welfare Approach → State as benefactor providing social amenities.

Income Approach → Oldest approach linking freedom directly to income level.

6. Which part of tree is used for making quinine?

- (A) Bark
- (B) Root
- (C) Fruit Seed
- (D) Flower

Correct Answer: (A) Bark

Solution:

Concept:

Gathering and plant-based resource extraction represent traditional primary economic activities practiced across tropical forest biomes.

Forests yield a diverse spectrum of non-timber forest products, including tannins, gums, resins, rubber, balata, and medicinal compounds.

Quinine is a naturally occurring alkaloid with potent antipyretic and antimalarial properties

derived from botanical specimens.

Step 1: Botanical Origin and Extraction of Quinine:

Quinine is derived specifically from the dried outer bark of trees belonging to the genus *Cinchona*, native to the Andean mountain forests of South America.

The bark contains several quinoline alkaloids, of which quinine is the primary therapeutic agent historically utilized worldwide for malaria treatment.

The process of harvesting involves stripping or peeling the bark from mature *Cinchona* trees, which is then dried, pulverized, and chemically processed.

Step 2: Evaluating the Other Plant Organs:

Roots, fruit seeds, and flowers of the *Cinchona* tree do not contain the requisite concentration of commercial quinine alkaloids.

Industrial and traditional pharmacopoeia relies exclusively on the bark of the *Cinchona* tree for commercial quinine extraction.

Final Answer:

Thus, the bark of the tree is used for making quinine.

Quick Tip: Remember key plant-derived commercial products from Geography textbooks:

Quinine → *Cinchona* tree bark.

Tannin → Bark and leaves of mangrove, wattle, quebracho.

Chicle (chewing gum) → Milky juice/latex of the zapote tree.

7. Which of the following is NOT a characteristic of Intensive Subsistence Farming?

- (A) It is practiced with or without paddy.
- (B) Land holdings are small.
- (C) It is characterized by heavy use of farm machinery.
- (D) Farm yard manure is used to maintain the fertility of soil.

Correct Answer: (C) It is characterized by heavy use of farm machinery.

Solution:

Concept:

Intensive subsistence agriculture is an agricultural system practiced predominantly in densely populated regions of Monsoon Asia.

Because land is limited relative to the massive human population, agricultural practices are designed to maximize crop output from every unit of arable land.

Step 1: Core Characteristics of Intensive Subsistence Farming:

This agrarian regime is subdivided into two primary types: intensive subsistence dominated by wet paddy, and intensive subsistence dominated by crops other than paddy (e.g., wheat, soybeans, barley, sorghum).

Land holdings are exceptionally small and fragmented due to generational inheritance laws. Farmers utilize extensive manual human labour and draft animals, with minimal or negligible application of heavy farm machinery.

Due to the tiny size of field plots, the use of large mechanised equipment like combine harvesters and heavy tractors is impractical and uneconomical.

Soil fertility is maintained through intensive application of organic inputs, particularly farmyard manure and compost.

Step 2: Identifying the Incorrect Statement:

The claim that it is characterized by "heavy use of farm machinery" is false.

Heavy use of modern farm machinery is the defining hallmark of Commercial Grain Farming (such as in the prairies, pampas, and steppes), not Intensive Subsistence Farming.

Final Answer:

Hence, being characterized by heavy use of farm machinery is NOT a characteristic of Intensive Subsistence Farming.

Quick Tip: Intensive Subsistence Farming: High yield per unit area, low yield per labourer, small fragmented plots, manual/animal labour, high population density.

Commercial Extensive Grain Farming: Low yield per unit area, high yield per labourer, massive mechanized farms, sparse population.

8. Bailadila iron ore mines are located in which state?

- (A) Madhya Pradesh
- (B) Karnataka
- (C) Maharashtra
- (D) Chhattisgarh

Correct Answer: (D) Chhattisgarh

Solution:

Concept:

India is endowed with abundant reserves of high-grade iron ore, particularly hematite and magnetite, situated mainly within the peninsular shield.

Major iron ore belts in India include the Odisha-Jharkhand belt, the Durg-Bastar-Chandrapur belt, the Ballari-Chitradurga-Chikkamagaluru-Tumakuru belt, and the Maharashtra-Goa belt.

Step 1: Locating the Bailadila Iron Ore Range:

The Bailadila range of hills is situated in the Bastar and Dantewada districts in the southern part of Chhattisgarh state.

The name "Bailadila" literally translates to the "hump of an ox," owing to the distinct topographical resemblance of the hill peaks.

These hills contain some of the highest-grade deposits of hematite iron ore in the world, with an iron content often exceeding 65%.

Iron ore from the Bailadila mines is transported via specialized railway slurry lines to Visakhapatnam port in Andhra Pradesh, from where it is exported to Japan and South Korea.

Step 2: Assessing Other States:

Madhya Pradesh lacks major high-grade iron ore mining ranges of the scale of Bailadila.

Karnataka features renowned iron ore deposits at Kudremukh, Bababudan hills, and the Sandur-Hospet range in Ballari.

Maharashtra contains iron ore in the Chandrapur and Ratnagiri districts.

Final Answer:

Therefore, the Bailadila iron ore mines are located in Chhattisgarh.

Quick Tip: Key Indian iron ore mines and states:

Chhattisgarh: Bailadila, Dalli-Rajhara.

Odisha: Badampahar, Gurumahisani, Kiriburu.

Jharkhand: Noamundi, Gua.

Karnataka: Kudremukh, Kemmangundi, Donimalai.

9. The people who are engaged in activities that are knowledge oriented are considered as the workers of _____.

- (A) Primary Activity
- (B) Secondary Activity
- (C) Tertiary Activity
- (D) Quaternary Activity

Correct Answer: (D) Quaternary Activity

Solution:**Concept:**

Economic activities are classified systematically into progressive tiers based on the nature of production, skill requirements, and functional complexity.

These include primary (resource extraction), secondary (manufacturing/processing), tertiary

(general consumer and commercial services), quaternary (information and knowledge), and quinary (high-level policy and decision-making) sectors.

Step 1: Definition of Quaternary Activities:

Quaternary activities represent a highly specialized segment of the service sector centered entirely on the generation, processing, and dissemination of information and knowledge.

These activities are fundamentally knowledge-oriented and involve high levels of technical competence, analytical ability, and research skills.

Professionals in this sector include software developers, research scientists, financial analysts, statisticians, university professors, and data managers.

Workers belonging to this knowledge-intensive group are commonly described as "white-collar" or "gold-collar" professionals operating within high-technology environments.

Step 2: Contrast with Other Economic Tiers:

Primary activity involves direct utilization of natural environmental resources (e.g., agriculture, mining, forestry).

Secondary activity transforms raw materials into finished manufactured goods (e.g., steel manufacturing, textile weaving).

Tertiary activity encompasses everyday commercial and personal service provisions (e.g., transport, retail, trade, plumbing).

Final Answer:

Thus, individuals engaged in knowledge-oriented activities are classified as workers of Quaternary Activity.

Quick Tip: Summary of economic sectors:

Primary → Natural resource extraction (Red collar).

Secondary → Manufacturing and construction (Blue collar).

Tertiary → General services and trade (Pink/White collar).

Quaternary → Knowledge, research, IT, information processing.

Quinary → Top decision makers, policy executives (Gold collar).

10. At which place a geothermal energy plant has been commissioned?

- (A) Manikaran
- (B) Khetri
- (C) Katni
- (D) Ratnagiri

Correct Answer: (A) Manikaran

Solution:

Concept:

Geothermal energy is the thermal energy generated and stored inside the Earth's interior crust. Magma heated groundwater rises toward the surface in the form of hot springs and geysers, creating steam that can be captured to turn turbines and generate clean, renewable electric power.

In India, exploration and experimental commissioning of geothermal pilot power plants have been undertaken at strategically identified hot-spring sites.

Step 1: Identifying the Commissioned Pilot Plant:

Manikaran is located in the Parbati Valley of the Kullu district in Himachal Pradesh.

It is famous for natural geothermal hot springs where groundwater reaches boiling temperatures naturally.

The Geological Survey of India (GSI) and the National Hydroelectric Power Corporation (NHPC) successfully set up an experimental geothermal power plant at Manikaran.

Another notable geothermal project area identified in India is the Puga Valley in the Ladakh region.

Step 2: Evaluating the Alternative Options:

Khetri in Rajasthan is renowned for underground copper mining operations.

Katni in Madhya Pradesh is widely celebrated for its extensive bauxite, limestone, and marble reserves.

Ratnagiri in Maharashtra is recognized for coastal ports, horticulture (Alphonso mangoes), and bauxite deposits.

Final Answer:

Consequently, an experimental geothermal energy plant has been commissioned at Manikaran.

Quick Tip: Prominent geothermal energy sites in India:

1. Manikaran (Parbati Valley, Himachal Pradesh).
2. Puga Valley (Ladakh).

11. Which of the following states had the highest density of population in 2011?

- (A) Bihar
- (B) West Bengal
- (C) Uttar Pradesh
- (D) Kerala

Correct Answer: (A) Bihar

Solution:**Concept:**

Population density is defined as the average number of persons residing per unit of land area, typically expressed as persons per square kilometer.

It serves as a critical demographic measure reflecting the spatial concentration of human population and pressure on land resources.

According to the 2011 Census of India, the overall national population density stood at 382 persons per km².

Step 1: Analyzing State-wise Densities (Census 2011):

In the 2001 Census, West Bengal held the position of the most densely populated state in India with 903 persons per km².

However, during the 2011 Census enumeration, Bihar recorded rapid demographic growth,

reaching a density of 1,106 persons per km².

West Bengal recorded 1,028 persons per km², moving to the second position among states.

Kerala recorded a density of 860 persons per km², holding the third rank.

Uttar Pradesh recorded a density of 829 persons per km², placing it fourth among these major states.

Step 2: Comparative Verification:

Comparing the densities of the listed states:

Bihar (1,106) > West Bengal (1,028) > Kerala (860) > Uttar Pradesh (829)

Among Union Territories, Delhi boasts the highest density overall (11,320 persons per km²), but among all Indian states, Bihar ranks first.

Final Answer:

Therefore, Bihar had the highest density of population in 2011.

Quick Tip: 2011 Census Population Density key facts:

Highest State Density: Bihar (1,106 persons/km²).

Second Highest State: West Bengal (1,028 persons/km²).

Lowest State Density: Arunachal Pradesh (17 persons/km²).

Highest Overall (UT): NCT of Delhi (11,320 persons/km²).

12. The ratio of total population to net cultivated area is called _____.

- (A) Population Density
- (B) Agricultural Density
- (C) Physiological Density
- (D) Geometric Density

Correct Answer: (C) Physiological Density

Solution:

Concept:

While simple arithmetic density divides total population by total geographical area, it masks variations in agricultural carrying capacity because large tracts of land may be barren, mountainous, or non-arable.

To evaluate the true biological and agricultural pressure exerted by human populations on productive land, geographers compute refined ecological indices of density.

Step 1: Formula for Physiological Density:

Physiological density (also called nutritional density) measures the human pressure exerted specifically on the net cultivated land.

It is mathematically defined as:

$$\text{Physiological Density} = \frac{\text{Total Population}}{\text{Net Cultivated Area}}$$

This metric provides a realistic assessment of a country's land resources to provide food for its entire resident populace.

Step 2: Contrast with Alternative Density Ratios:

Arithmetic Population Density is defined as:

$$\text{Arithmetic Density} = \frac{\text{Total Population}}{\text{Total Geographical Area}}$$

Agricultural Density measures the farming population relative to farmland:

$$\text{Agricultural Density} = \frac{\text{Total Agricultural Population}}{\text{Net Cultivated Area}}$$

Here, the agricultural population includes farmers, agricultural labourers, and their immediate family dependents.

Final Answer:

Therefore, the ratio of total population to net cultivated area is called Physiological Density.

Quick Tip: Remember the clear distinctions:

$$\text{Physiological Density} = \frac{\text{Total Population}}{\text{Net Cultivated Area}}$$

$$\text{Agricultural Density} = \frac{\text{Agricultural Population}}{\text{Net Cultivated Area}}$$

$$\text{Arithmetic Density} = \frac{\text{Total Population}}{\text{Total Area}}$$

13. Which of the following languages has the highest percentage of speakers in India?

- (A) Bengali
- (B) Hindi
- (C) Telugu
- (D) Marathi

Correct Answer: (B) Hindi

Solution:

Concept:

India is a linguistically diverse nation comprising four major language families: Indo-Aryan (Indo-European), Dravidian, Austro-Asiatic (Nishada), and Tibeto-Burman (Kirata).

The Indo-Aryan language family forms the largest group, spoken by nearly three-fourths of the total Indian population.

Step 1: Census Data Analysis of Spoken Languages:

According to the 2011 Census of India:

Hindi is the most widely spoken primary language in India, with approximately 43.63% of the total population reporting it as their mother tongue.

Bengali is the second most spoken language in India, accounting for roughly 8.03% of the national population.

Marathi stands third with approximately 6.86% of speakers.

Telugu ranks fourth among individual languages, accounting for approximately 6.70% of the population.

Step 2: Comparing the Proportions:

The percentage of Hindi speakers substantially exceeds that of any other linguistic group across the subcontinent.

Hence, Hindi constitutes the single largest linguistic group by an extensive margin.

Final Answer:

Therefore, Hindi has the highest percentage of speakers in India.

Quick Tip: Rank of most spoken mother tongues in India (Census 2011):

1. Hindi (43.63%)
2. Bengali (8.03%)
3. Marathi (6.86%)
4. Telugu (6.70%)
5. Tamil (5.70%)

14. Neodeterminism is also known as:

- (A) Naturalisation of Humans
- (B) Humanisation of Nature
- (C) Stop and go determinism
- (D) Possibilism

Correct Answer: (C) Stop and go determinism

Solution:**Concept:**

In human geography, the philosophical relationship between nature and human society has evolved across various paradigms.

Environmental Determinism (naturalisation of humans) argued that nature strictly dictates human action.

Possibilism (humanisation of nature) contended that nature provides opportunities and humans act as masters of choice.

To reconcile these two extreme dialectical viewpoints, a conceptual middle path was introduced.

Step 1: Introduction of Neo-Determinism:

The concept of Neo-determinism was introduced by Australian geographer Griffith Taylor.

Taylor referred to this concept as "Stop and Go Determinism".

He used the metaphor of a city traffic controller who can accelerate, slow down, or stop the flow of traffic, but cannot alter its ultimate direction.

Similarly, humans can accelerate or redirect socioeconomic development only within limits set by physical nature; they cannot conquer nature recklessly without triggering severe ecological crises.

Step 2: Evaluation of Other Concepts:

Naturalisation of humans describes Environmental Determinism where primitive humans live in absolute harmony with and subjugation to nature.

Humanisation of nature reflects Possibilism where technological development allows humans to modify nature.

Final Answer:

Consequently, Neodeterminism is also known as Stop and go determinism.

Quick Tip: Key philosophical associations:

Environmental Determinism → Friedrich Ratzel, Ellen Churchill Semple.

Possibilism → Paul Vidal de la Blache, Lucien Febvre.

Neo-determinism / Stop and Go Determinism → Griffith Taylor.

15. The third most populous country in the world is:

(A) Indonesia

(B) U.S.A.

- (C) Brazil
(D) Nigeria

Correct Answer: (B) U.S.A.

Solution:

Concept:

Global population is unevenly distributed across continents and sovereign countries.

A large majority of the world's population resides in a handful of demographically massive countries located primarily in Asia and the Americas.

Standard NCERT demographic tables document the rank order of the world's most populous nations.

Step 1: Global Population Hierarchy:

Historically and in standard geographical textbooks:

1. China holds one of the top two spots (with approximately 1.4 billion people).
2. India holds the other of the top two positions (exceeding 1.4 billion people).
3. The United States of America (U.S.A.) ranks as the third most populous country in the world, with a population exceeding 335 million.
4. Indonesia ranks fourth globally, with approximately 275 million people.
5. Pakistan ranks fifth, followed by Nigeria and Brazil.

Step 2: Evaluating the Listed Nations:

Comparing the populations of the provided options:

U.S.A. ($\approx$ 335 million) holds rank 3.

Indonesia ($\approx$ 275 million) holds rank 4.

Nigeria ($\approx$ 220 million) holds rank 6.

Brazil ($\approx$ 215 million) holds rank 7.

Final Answer:

Thus, the third most populous country in the world is the U.S.A.

Quick Tip: Top 5 most populous countries:

1. India / China
2. China / India
3. U.S.A.
4. Indonesia
5. Pakistan

16. In India, compact or clustered settlements in rural areas are generally found in _____.

- (A) remote jungles or in hilly areas.
- (B) fertile alluvial plains.
- (C) lower valleys of Himalayas
- (D) Meghalaya and Himachal Pradesh

Correct Answer: (B) fertile alluvial plains.

Solution:

Concept:

Rural settlements in India display diverse morphological forms shaped by physical geography, water availability, cultural security, and agrarian systems.

These patterns are classified broadly into four types:

1. Clustered, agglomerated, or compact settlements.
2. Semi-clustered or fragmented settlements.
3. Hamleted settlements (Panna, Para, Nagla, Dhani).
4. Dispersed or isolated settlements.

Step 1: Morphology of Clustered/Compact Settlements:

A clustered or compact rural settlement is a closely built-up area of dwellings where the living area is distinctly separated from surrounding agricultural fields.

Streets and alleys present recognizable geometric shapes such as rectangular, radial, or linear patterns.

These settlements develop extensively across flat, highly productive agrarian zones such as the fertile alluvial Northern Plains (Indo-Gangetic plains) and coastal deltas.

They also emerge in valleys where water supply is abundant and community collaboration is vital for wet-paddy farming.

Step 2: Analysis of Dispersed Settlement Regions:

Remote jungles, rugged hilly terrain, the lower valleys of the Himalayas, and dissected plateaus of Meghalaya and Himachal Pradesh promote isolated, dispersed huts.

In rugged regions, fragmented relief prevents the formation of compact village clusters.

Final Answer:

Therefore, compact or clustered settlements are typically found in fertile alluvial plains.

Quick Tip: Rural settlement types by terrain:

Compact/Clustered → Fertile alluvial plains, valleys with intensive agriculture.

Dispersed/Isolated → Hilly terrains, dense forests (Himachal Pradesh, Meghalaya, Uttarakhand).

Semi-clustered → Gujarat plains, parts of Rajasthan.

17. Which of the following is NOT an ancient town of India?

- (A) Varanasi
- (B) Madurai
- (C) Hyderabad
- (D) Pataliputra (Patna)

Correct Answer: (C) Hyderabad

Solution:

Concept:

On the basis of their historical evolution, Indian towns and cities are broadly categorized into

three distinct chronological groups:

1. Ancient Towns (developed more than 2,000 years ago, often as religious, cultural, or administrative centers).
2. Medieval Towns (developed during the medieval period as headquarters of principalities, kingdoms, and Sultanates).
3. Modern Towns (developed by the British and other European colonial powers or post-independence planned cities).

Step 1: Identifying Ancient Towns:

Varanasi is among the oldest continuously inhabited cultural and religious cities in the world. Madurai flourished as an ancient cultural and commercial capital of the Pandya kingdom in South India.

Pataliputra (modern Patna) was established as the grand imperial capital of the ancient Magadha Empire, Maurya Empire, and Gupta Empire.

Step 2: Categorizing Hyderabad:

Hyderabad was founded in 1591 CE by Muhammad Quli Qutb Shah of the Golconda Sultanate along the Musi River.

Because it was founded during the 16th century CE, Hyderabad falls under the classification of a Medieval Town, alongside Delhi, Agra, Jaipur, and Lucknow.

Final Answer:

Therefore, Hyderabad is NOT an ancient town of India.

Quick Tip: Classification of Indian Towns:

Ancient (> 2000 years old): Varanasi, Ayodhya, Prayag, Pataliputra, Madurai.

Medieval: Delhi, Hyderabad, Agra, Jaipur, Lucknow, Lahore.

Modern: Mumbai, Chennai, Kolkata, Goa, Chandigarh, Gandhinagar.

18. In geography, regions, villages and towns have been described as _____.

- (A) Face
- (B) Organisms
- (C) Arteries of circulation
- (D) Profile

Correct Answer: (B) Organisms

Solution:

Concept:

Geographical literature frequently utilizes organic and biological metaphors to describe physical and human phenomena.

Such conceptual metaphors bridge the functional interdependence between constituent parts of a landscape and living systems.

Early geographers used anatomical and biological analogies to conceptualize spatial organization.

Step 1: Anatomical and Biological Metaphors in Geography:

Physical landscapes are often described through anatomical terms such as "face of the earth", "eye of the storm", "mouth of a river", and "profile of the soil".

Similarly, organized human communities and spatial entities such as regions, villages, and towns have been viewed as living "organisms".

German geographer Friedrich Ratzel famously conceptualized the state as a dynamic spatial organism requiring living space (*Lebensraum*).

Step 2: Context of Arteries of Circulation:

Transport and communication networks (railways, roadways, and waterways) are metaphorically referred to as "arteries of circulation".

However, spatial territorial units such as regions, villages, and towns themselves are described specifically as organisms.

Final Answer:

Hence, regions, villages, and towns have been described in geography as Organisms.

Quick Tip: Common geographical metaphors:

Regions, villages, towns → Organisms.

Transport networks (roads, railways) → Arteries of circulation.

Earth's surface → Face of the earth.

19. Which of the following types of wasteland is NOT primarily caused by human action?

- (A) Degraded land under plantation crops.
- (B) Degraded forests and pastures.
- (C) Mining and industrial wastelands.
- (D) Barren rocky areas and steep sloping land.

Correct Answer: (D) Barren rocky areas and steep sloping land.

Solution:

Concept:

Wasteland refers to degraded land that is currently uncultivated, unproductive, or ecologically deteriorated.

Wastelands are classified by their genesis into two categories:

1. Wastelands caused primarily by natural factors (geomorphological, climatic, or geological processes).
2. Wastelands induced or aggravated primarily by anthropogenic (human) interventions.

Step 1: Evaluating Human-Induced Wastelands:

Degraded land under plantation crops results from improper soil conservation, monoculture, and soil depletion caused by human management.

Degraded forests and pastures result directly from anthropogenic overgrazing, commercial logging, and indiscriminate deforestation.

Mining and industrial wastelands are created by human mineral extraction, dumping of overburden, and industrial toxic effluents.

Step 2: Evaluating Naturally Caused Wastelands:

Barren rocky outcrops, steep sloping cliffs, deserts, and glaciated terrain are produced primarily by natural geomorphic processes of weathering, erosion, and tectonic uplifting. These lands lack topsoil naturally due to extreme slope and geological rock resistance, independent of direct human action.

Final Answer:

Therefore, Barren rocky areas and steep sloping land is NOT primarily caused by human action.

Quick Tip: Classification of Wastelands:

Natural causes: Barren rocky areas, steep slopes, desert sands, glacial zones.

Anthropogenic causes: Salinised canal-irrigated soils, degraded pastures, mining wastelands, industrial dumping grounds.

20. Which of the following is ignored by the World Trade Organization?

- (A) Rules related to trade between nations.
- (B) Issues of worker's right and child labour.
- (C) Trade in services.
- (D) Issues of intellectual property rights.

Correct Answer: (B) Issues of worker's right and child labour.

Solution:**Concept:**

The World Trade Organization (WTO) was established on January 1, 1995, succeeding the General Agreement on Tariffs and Trade (GATT).

The WTO serves as the sole international body dealing with multilateral trade rules governing nations.

While the WTO oversees global trade agreements, its institutional scope and focus have faced consistent critique from civil society and developing countries.

Step 1: Mandate of the WTO:

The official mandate of the WTO encompasses:

1. Setting binding rules for international trade in goods and manufactured merchandise.
2. Governing trade in services (General Agreement on Trade in Services - GATS).
3. Protecting Trade-Related Aspects of Intellectual Property Rights (TRIPS).
4. Providing a formal dispute settlement mechanism for member nations.

Step 2: Areas Critiqued as Being Ignored:

Critics emphasize that the WTO framework prioritizes trade liberalization and corporate commercial interests while largely sidelining critical social welfare issues.

Specifically, basic issues concerning workers' rights, child labour exploitation, environmental conservation, and public health safeguards are largely omitted or subordinated within core WTO rules.

Final Answer:

Consequently, Issues of worker's right and child labour are ignored by the World Trade Organization.

Quick Tip: Key features of the WTO:

Headquarters: Geneva, Switzerland.

Established: January 1, 1995.

Core Coverage: Merchandise trade, Services (GATS), Intellectual Property (TRIPS).

Common Criticism: Neglects labour standards, workers' rights, child labour, and environmental protection.

21. Pipelines are used to supply milk from farms to factories in _____.

(A) New Zealand

- (B) USA
- (C) Russia
- (D) Turkmenistan

Correct Answer: (A) New Zealand

Solution:

Concept:

Pipeline transport is a highly specialized, continuous mode of conveyance used primarily to transport liquids, gases, and slurries without intermediate handling.

While pipelines most commonly move crude petroleum, petroleum products, and natural gas, innovative logistical adaptations exist for specialized agricultural commodities in advanced pastoral economies.

Step 1: Dairy Farming Infrastructure in New Zealand:

New Zealand is one of the world's leading exporters of processed dairy products, including butter, cheese, and milk powder.

Commercial dairy farms in New Zealand operate on large-scale mechanized principles.

To ensure maximum freshness, minimize transport bottlenecks, and avoid bacterial spoilage, specialized hygienic pipeline networks have been constructed in certain agricultural districts. These refrigerated pipelines transport milk directly from rural dairy farms to central dairy processing factories.

Step 2: Examination of Alternative Nations:

The USA extensively utilizes pipelines for petroleum products (e.g., the Big Inch pipeline).

Russia and Turkmenistan operate vast pipeline networks primarily for natural gas and crude oil exports across Eurasia.

Final Answer:

Thus, pipelines are used to supply milk from farms to factories in New Zealand.

Quick Tip: Important pipelines in World Geography:

Milk pipeline: New Zealand (farms to factories).

Big Inch: USA (crude oil from Gulf of Mexico to Northeast).

Tapline: Middle East (Persian Gulf to Mediterranean).

22. The present level of urbanisation in world falls under which of following categories?

- (A) Below 35 percent
- (B) 35 to 50 percent
- (C) 50 to 75 percent
- (D) Above 75 percent

Correct Answer: (C) 50 to 75 percent

Solution:

Concept:

Urbanization is defined as the demographic and spatial process whereby an increasing percentage of a territory's total population becomes concentrated in designated urban settlements.

The global level of urbanization has risen dramatically over the past two centuries as nations transitioned from agrarian economies to industrial and service-oriented societies.

Step 1: Global Urbanization Trends:

In the year 1800, only about 3% of the world's population resided in urban areas.

By 1900, this figure reached approximately 14%, and by 1950 it grew to nearly 30%.

In 2007–2008, a historic milestone was achieved when the global urban population exceeded the rural population for the first time in human history (> 50%).

Currently, the proportion of the world's population living in urban centers stands between 55% and 57%.

Step 2: Mapping into Given Range Categories:

Looking at the provided intervals:

- (A) Below 35 percent
- (B) 35 to 50 percent
- (C) 50 to 75 percent
- (D) Above 75 percent

Since the present global urbanization level of $\approx 56\%$ lies squarely between 50% and 75%, it falls under the 50 to 75 percent category.

Final Answer:

Therefore, the present level of urbanisation in the world falls under 50 to 75 percent.

Quick Tip: Key Urbanization Milestones:

1800: $\approx 3\%$

1900: $\approx 14\%$

1950: $\approx 30\%$

2008: Crossed 50% threshold.

Present: $\approx 56\%$ (Falls in the 50 to 75 percent category).

23. Big Inch pipeline is located in which of the following continents?

- (A) North America
- (B) Africa
- (C) Australia
- (D) Asia

Correct Answer: (A) North America

Solution:

Concept:

Pipelines are subterranean or surface conduits engineered for the continuous transport of bulk

fluid commodities like petroleum, refined fuels, and natural gas.

They offer substantial advantages including continuous delivery, zero transit delay, and immunity to surface traffic congestion or adverse weather.

Step 1: Origin and Geography of the Big Inch Pipeline:

The "Big Inch" pipeline is one of the most famous and historically significant oil pipelines in the United States of America.

It was constructed during World War II (1942–1943) as an emergency measure to transport crude oil safely overland away from the threat of submarine attacks in coastal shipping corridors.

The pipeline has a diameter of 24 inches (610 mm) and connects the prolific petroleum wells of the Gulf of Mexico region (East Texas) to the industrial refineries in the northeastern states (New Jersey and Pennsylvania).

Step 2: Continental Identification:

The United States of America is located on the continent of North America.

Therefore, the Big Inch pipeline is an integral component of the North American transcontinental pipeline grid.

Final Answer:

Hence, the Big Inch pipeline is located on the continent of North America.

Quick Tip: Key Facts about the Big Inch:

Country: USA (Continent: North America).

Connects: Gulf of Mexico oilfields to Northeastern USA.

Commodity: Petroleum/crude oil.

Diameter: 24 inches.

24. Which of the following has significantly contributed to turn the concept of the global village into a reality?

- (A) Trans-Continental Railways
- (B) Trans-Continental Highways
- (C) Cyber Space
- (D) Inter-Continental Airways

Correct Answer: (C) Cyber Space

Solution:

Concept:

The term "global village" was coined by media theorist Marshall McLuhan to describe a world interconnected into a single electronic community through telecommunications.

In a global village, spatial distance is effectively collapsed, enabling real-time exchange of information, commerce, and culture regardless of physical geography.

Step 1: Role of Information Technology and Cyber Space:

Cyber space represents the virtual electronic realm encompassing computer networks, the Internet, and modern satellite communications.

Unlike physical transport modes (such as railways, highways, or aviation), cyber space enables instantaneous data transmission, communication, and digital interaction at the speed of light. The internet and digital networks have integrated financial markets, corporate operations, news media, and personal social connections worldwide, truly transforming the globe into an interconnected village.

Step 2: Limitation of Physical Transport Modes:

Trans-continental railways, highways, and intercontinental airways are crucial for moving physical bulk goods and passengers.

However, physical travel still requires substantial time and is constrained by geographic distance.

Only electronic cyber space provides the instantaneous, omnipresent connectivity required to turn the concept of the global village into reality.

Final Answer:

Therefore, Cyber Space has significantly contributed to turning the concept of the global

village into a reality.

Quick Tip: Transport vs. Communication:

Transport (Airways, Railways, Roads): Moves physical goods and passengers across physical space.

Communication (Cyber Space / Internet): Transmits information instantaneously, eliminating spatial friction and creating the "Global Village".

25. Which out of the following is NOT a source of water pollution?

- (A) Sewage Disposal
- (B) Urban run-off
- (C) Combustion of coal
- (D) Run-off over cultivated lands

Correct Answer: (C) Combustion of coal

Solution:

Concept:

Environmental pollution is the contamination of physical and biological components of the earth/atmosphere system to such an extent that normal environmental processes are adversely affected.

Water pollution specifically occurs when undesirable chemical, biological, or physical substances enter water bodies, deteriorating water quality and making it toxic to living organisms.

Step 1: Evaluating Direct Sources of Water Pollution:

Sewage disposal involves domestic wastewater carrying organic matter, toxic pathogens, and detergents directly into water channels.

Urban run-off gathers motor oil, heavy metals, road debris, and municipal litter, discharging them directly into stormwater drains and urban rivers.

Run-off over cultivated lands carries chemical fertilizers, pesticides, herbicides, and insecticides into streams and groundwater reserves, causing eutrophication.

All three options are primary direct sources of aquatic pollution.

Step 2: Evaluating the Combustion of Coal:

Combustion of coal in thermal power plants and factories releases particulate matter, sulfur dioxide (SO_2), nitrogen oxides (NO_x), and carbon dioxide (CO_2) directly into the atmosphere. Therefore, the combustion of coal is classified primarily as a major source of air pollution.

Final Answer:

Hence, Combustion of coal is NOT a direct source of water pollution.

Quick Tip: Pollution source classification:

Water Pollution Sources: Domestic sewage, industrial wastewater, agricultural chemical run-off, urban surface wash.

Air Pollution Sources: Combustion of coal, vehicular emissions, burning of fossil fuels, smelting emissions.

26. Arrange the following countries in descending order of population size:

A. China

B. Brazil

C. Bangladesh

D. Mexico

Choose the correct answer from the options given below:

(A) A, B, C, D

(B) A, C, B, D

(C) B, A, D, C

(D) C, B, D, A

Correct Answer: (A) A, B, C, D

Solution:

Concept:

The global distribution of human population is characterized by extreme spatial concentration, with a substantial percentage of the world's inhabitants residing in a small group of demographically prominent nations.

Demographers and geographers systematically study national population counts based on official census enumerations and international United Nations demographic datasets.

Analyzing countries in descending order of population size requires ranking them sequentially from the highest absolute population to the lowest.

Step 1: Demographic Data Analysis for Listed Nations:

1. China (A): China is one of the two global demographic giants, with an estimated population exceeding 1.4 billion people, placing it at the very top of this group.
2. Brazil (B): As the most populous nation in South America, Brazil possesses a population of approximately 215 million inhabitants, ranking 7th globally.
3. Bangladesh (C): Located in South Asia, Bangladesh has an exceptionally high population density and an aggregate population of approximately 170 million inhabitants, ranking 8th globally.
4. Mexico (D): Situated in North America, Mexico has a total population of approximately 128 million people, ranking 10th globally.

Step 2: Determining the Correct Descending Sequence:

Arranging the given countries from largest to smallest population size yields:

$$\text{China (1.4 B)} > \text{Brazil (215 M)} > \text{Bangladesh (170 M)} > \text{Mexico (128 M)}$$

This corresponds precisely to the alphabetical sequence: A, B, C, D.

Final Answer:

Therefore, the correct arrangement in descending order is A, B, C, D.

Quick Tip: Key demographic ranking of world nations:

Top tier: India and China (≈ 1.4 billion).

Middle tier: USA (≈ 335 M), Indonesia (≈ 275 M), Pakistan (≈ 240 M), Nigeria (≈ 225 M), Brazil (≈ 215 M), Bangladesh (≈ 170 M), Russia (≈ 144 M), Mexico (≈ 128 M).

27. Arrange the following ports in North to South direction.

A. Deendayal Port

B. Mumbai Port

C. Kochchi Port

D. Mangaluru Port

Choose the correct answer from the options given below:

(A) A, B, C, D

(B) B, C, D, A

(C) A, B, D, C

(D) B, A, D, C

Correct Answer: (C) A, B, D, C

Solution:

Concept:

India has an extensive coastline extending over 7,516.6 km, serviced by 12 major commercial ports and over 200 notified non-major ports.

The major ports situated along the western seaboard of the Arabian Sea provide vital gateways for international maritime trade with West Asia, Africa, Europe, and the Americas.

Spatial questions regarding port locations require an accurate understanding of their latitudinal coordinates from North to South along the coastline.

Step 1: Latitudinal Positioning of Western Seaboard Ports:

1. Deendayal Port (A): Formerly known as Kandla Port, it is a major tidal port located at the eastern end of the Gulf of Kachchh in the state of Gujarat (approximately $23^{\circ}00'$ N latitude).

2. Mumbai Port (B): A premier natural deep-water harbour located along the Konkan coast of Maharashtra (approximately $18^{\circ}56'$ N latitude).
3. Mangaluru Port (D): Also designated as New Mangalore Port, it is situated along the coastal plains of Karnataka (approximately $12^{\circ}55'$ N latitude).
4. Kochchi Port (C): Located on the Willington Island within the Vembanad Lake along the Malabar coast in Kerala (approximately $9^{\circ}58'$ N latitude).

Step 2: Sequential Ordering from North to South:

Comparing the latitudes sequentially from highest to lowest:

Deendayal (23°N) $\rightarrow$ Mumbai (18.9°N) $\rightarrow$ Mangaluru (12.9°N) $\rightarrow$ Kochchi (9.9°N)

This forms the geographical sequence: A, B, D, C.

Final Answer:

Thus, the correct North to South arrangement of ports is A, B, D, C.

Quick Tip: Western coast ports in North-to-South order:

Deendayal (Kandla, Gujarat) $\rightarrow$ Mumbai (Maharashtra) $\rightarrow$ JNPT / Nhava Sheva (Maharashtra) $\rightarrow$ Mormugao (Goa) $\rightarrow$ New Mangalore (Karnataka) $\rightarrow$ Kochchi (Kerala).

28. Arrange the following oil refineries in West to East direction.

- A. Mathura
- B. Barauni
- C. Panipat
- D. Bathinda

Choose the correct answer from the options given below:

- (A) C, D, A, B
- (B) D, C, A, B
- (C) B, A, D, C
- (D) C, B, D, A

Correct Answer: (B) D, C, A, B

Solution:

Concept:

Oil refineries in India are strategically categorized into two spatial types: field-based refineries (located close to crude oil producing fields, e.g., Digboi) and market-based refineries (located near major inland consumption hubs, e.g., Mathura).

Determining the relative longitudinal placement of petroleum refining complexes from West to East requires understanding their exact geographical distribution across northern and eastern India.

Step 1: Longitudinal Coordinates of Given Refineries:

1. Bathinda (D): Guru Gobind Singh Refinery, operated by HPCL-Mittal Energy Limited (HMEL), is located in the southwestern district of Punjab at approximately $74^{\circ}57'$ E longitude.
2. Panipat (C): Operated by the Indian Oil Corporation Limited (IOCL), this major refinery is located in Haryana at approximately $76^{\circ}58'$ E longitude.
3. Mathura (A): Also operated by IOCL, this market-based refinery is situated in western Uttar Pradesh at approximately $77^{\circ}41'$ E longitude.
4. Barauni (B): Established with Soviet collaboration in Begusarai district of Bihar, this refinery is situated at approximately $85^{\circ}58'$ E longitude.

Step 2: Sequential Ordering from West to East:

Arranging these refineries in increasing order of eastern longitude:

Bathinda (74.9° E) $\rightarrow$ Panipat (76.9° E) $\rightarrow$ Mathura (77.7° E) $\rightarrow$ Barauni (86.0° E)

This yields the exact sequence: D, C, A, B.

Final Answer:

Therefore, the correct arrangement from West to East is D, C, A, B.

Quick Tip: State-wise West to East alignment across Northern India:

Punjab (Bathinda) → Haryana (Panipat) → Western UP (Mathura) → Bihar (Barauni) → Assam (Bongaigaon, Guwahati, Digboi).

29. Arrange the following religious groups in decreasing order of their population in India:

A. Jains

B. Christians

C. Buddhists

D. Sikhs

Choose the correct answer from the options given below:

(A) A, B, C, D

(B) A, D, B, C

(C) B, D, C, A

(D) C, B, D, A

Correct Answer: (C) B, D, C, A

Solution:

Concept:

Religious composition forms a vital element of the socio-cultural fabric of India's population geography.

Data gathered by the decennial Census of India enumerates six major religious communities: Hindus, Muslims, Christians, Sikhs, Buddhists, and Jains, alongside other religions and persuasions.

To arrange the religious groups in decreasing order, one must compare their respective demographic shares as recorded in the official Census 2011 figures.

Step 1: Census 2011 Religious Demographic Figures:

The demographic distribution of religious communities in India is as follows:

- Hindus: 79.8% of total population (966.3 million).

- Muslims: 14.2% of total population (172.2 million).
- Christians (B): 2.3% of total population (27.8 million).
- Sikhs (D): 1.7% of total population (20.8 million).
- Buddhists (C): 0.7% of total population (8.4 million).
- Jains (A): 0.37% of total population (4.5 million).

Step 2: Ranking in Decreasing Order:

Arranging the given four minority religious communities from largest to smallest population:

Christians (2.3%) > Sikhs (1.7%) > Buddhists (0.7%) > Jains (0.37%)

This matches the exact sequence: B, D, C, A.

Final Answer:

Hence, the correct decreasing order of population is B, D, C, A.

Quick Tip: Remember religious population rank in India (Census 2011):

Hindus (79.8%) > Muslims (14.2%) > Christians (2.3%) > Sikhs (1.7%) > Buddhists (0.7%) > Jains (0.4%).

30. Arrange the following approaches of human geography from earlier colonial times to 1990s.

A. Spatial Organization

B. Post-Modernism in geography

C. Areal Differentiation

D. Emergence of humanistic, radical and behavioral schools

Choose the correct answer from the options given below:

(A) A, B, C, D

(B) C, B, A, D

(C) B, A, D, C

(D) C, A, D, B

Correct Answer: (D) C, A, D, B

Solution:

Concept:

The discipline of human geography has witnessed a continuous evolution of paradigms, conceptual perspectives, and methodologies.

This evolution reflects changing epistemological traditions ranging from early exploratory and regional approaches to spatial quantitative modeling, followed by welfare critique, and finally post-modern deconstruction.

Step 1: Chronology of Approaches in Human Geography:

According to NCERT's Fundamentals of Human Geography, the historical evolution of approaches is classified as follows:

1. Early Colonial Period: Exploration and description.
2. Later Colonial Period: Regional analysis.
3. 1930s through the Inter-War Period: Areal Differentiation (C), focusing on uniqueness of regions and understanding why one area differs from another.
4. Late 1950s to late 1960s: Spatial Organization (A), marked by the Quantitative Revolution, application of computers, statistical tools, and laws of physics to spatial patterns.
5. 1970s: Emergence of Humanistic, Radical, and Behavioural Schools (D), reacting against mechanistic quantitative models to study social reality, poverty, and human perception.
6. 1990s: Post-Modernism in Geography (B), emphasizing local contexts, grand theory skepticism, and pluralistic interpretations.

Step 2: Determining the Correct Chronological Sequence:

Tracing the sequence from earliest to latest:

Areal Differentiation (C) → Spatial Organization (A) → Radical/Humanistic/Behavioural (D) → Post-Modernism (B)

This gives the order: C, A, D, B.

Final Answer:

Therefore, the correct chronological sequence of approaches is C, A, D, B.

Quick Tip: Chronology of Human Geography Paradigms:

1930s: Areal Differentiation.

1950s–1960s: Spatial Organization (Quantitative Revolution).

1970s: Radical, Humanistic, and Behavioural Schools.

1990s: Post-Modernism in Geography.

31. Identify the correct statements regarding water resources of India.

- A. India accounts for about 4 percent of the world's water resources.**
- B. Annual precipitation in India is about 2000 cubic km.**
- C. The total utilisable water resource in the country is about 1122 cubic km.**
- D. Agriculture sector is the leading consumer of surface and groundwater.**

Choose the correct answer from the options given below:

- (A) A, B and C only
- (B) A, B and D only
- (C) B, C and D only
- (D) A, C and D only

Correct Answer: (D) A, C and D only

Solution:

Concept:

Water is a vital renewable natural resource essential for sustaining agricultural production, industrial manufacturing, and human livelihoods.

India supports nearly 17.7% of the global human population on just 2.45% of the world's geographical land surface, creating severe per capita water availability pressures.

Step 1: Verification of Each Statement:

Statement A: India accounts for roughly 4% of the global freshwater resources, which is factually correct.

Statement B: The total water available from annual precipitation (rainfall and snowfall) across India is estimated at approximately 4,000 cubic km, NOT 2,000 cubic km. Therefore, statement B is incorrect.

Statement C: Due to topographical, geological, and technological limitations, the total utilisable water resource in the country is estimated at only about 1,122 cubic km (comprising 690 cubic km of surface water and 432 cubic km of replenishable groundwater). Hence, statement C is correct.

Statement D: The agricultural sector accounts for nearly 89% of surface water withdrawal and 92% of groundwater withdrawal, making it overwhelmingly the leading consumer of both sources. Thus, statement D is correct.

Step 2: Conclusion:

Statements A, C, and D are factually accurate, while statement B is incorrect.

Final Answer:

Therefore, the correct answer is A, C and D only.

Quick Tip: Key Water Statistics of India (NCERT):

Precipitation volume: $\approx 4,000 \text{ km}^3/\text{year}$.

Total utilisable water: $1,122 \text{ km}^3$ (690 km^3 surface + 432 km^3 groundwater).

Agriculture consumption: 89% of surface water, 92% of groundwater.

32. Identify correct statements regarding commercial dairy farming.

- A. It is highly capital intensive.
- B. It is practiced in North Western Europe.
- C. It is practiced mainly near urban and industrial centres.
- D. It is not labour intensive.

Choose the correct answer from the options given below:

- (A) A, C and D only
- (B) A, B and C only
- (C) A, B and D only
- (D) B, C and D only

Correct Answer: (B) A, B and C only

Solution:

Concept:

Dairy farming is the most advanced, efficient, and specialized commercial livestock rearing system devoted primarily to the production of milk and processed dairy commodities.

Because milk and fresh dairy products are highly perishable, the spatial organization and operational economics of dairy farms are heavily influenced by market proximity and transportation efficiency.

Step 1: Evaluation of Core Statements:

Statement A: Dairy farming is highly capital intensive because significant funds are invested in animal sheds, specialized storage facilities, mechanical milching machines, fodder feeding equipment, and veterinary healthcare. Hence, statement A is correct.

Statement B: The largest and most prominent commercial dairy belt in the world is situated in North Western Europe, stretching across Britain, Denmark, the Netherlands, and northern France. Thus, statement B is correct.

Statement C: Dairy farms are located primarily near urban and industrial centres because urban conglomerates provide massive daily consumer demand for fresh milk and butter. Hence, statement C is correct.

Statement D: Unlike arable crop farming, dairy farming requires continuous year-round care, feeding, cleaning, disease management, and milking of livestock with no off-season break. Therefore, it is highly labour intensive. The assertion that it is "not labour intensive" is false.

Step 2: Conclusion:

Statements A, B, and C are correct, while statement D is incorrect.

Final Answer:

Thus, the correct option is A, B and C only.

Quick Tip: Characteristics of Commercial Dairy Farming:

1. Highly capital intensive and highly labour intensive.
2. No off-season (requires continuous animal care).
3. Three main regions: North-Western Europe, Canada, South-Eastern Australia/New Zealand.

33. Consider the following and identify the correct statements.

- A. The Christian population is distributed mostly in rural areas of the country.**
- B. Sikhs are mostly concentrated in relatively small area of the country.**
- C. Buddhists are concentrated mostly in Andhra Pradesh.**
- D. Jains have a major concentration in the urban areas of Rajasthan, Gujarat and Maharashtra.**

Choose the correct answer from the options given below:

- (A) A, B and D only
- (B) A, B and C only
- (C) A, C and D only
- (D) B, C and D only

Correct Answer: (A) A, B and D only

Solution:

Concept:

The spatial distribution of religious communities in India is diverse and deeply linked with regional historical, social, and economic patterns.

Each religious group demonstrates distinct spatial clustering, regional concentration, and rural-urban residential preferences across Indian states.

Step 1: Evaluation of the Statements:

Statement A: The Christian population in India is concentrated primarily in rural pockets along

the Western coast (in Goa and Kerala) and across the rural hill states of the North-Eastern region (such as Meghalaya, Mizoram, and Nagaland). Thus, statement A is correct.

Statement B: Sikhs are concentrated in a relatively compact geographic zone of the country, with over 75% residing in the state of Punjab and its immediate adjoining areas of Haryana and Delhi. Hence, statement B is correct.

Statement C: Buddhists are concentrated primarily in Maharashtra (over 73% of Indian Buddhists live in Maharashtra due to the mass conversion movement under Dr. B. R. Ambedkar), along with smaller populations in Sikkim, Ladakh, and Arunachal Pradesh, NOT Andhra Pradesh. Therefore, statement C is false.

Statement D: Jains are traditionally engaged in mercantile trade, commerce, and finance, leading to a strong concentration in the urban centers of Rajasthan, Gujarat, and Maharashtra. Hence, statement D is correct.

Step 2: Conclusion:

Statements A, B, and D are correct, while statement C is incorrect.

Final Answer:

Therefore, the correct answer is A, B and D only.

Quick Tip: Spatial distribution of religious minorities in India:

Christians → Rural coastal areas (Goa, Kerala) and North-East hill states.

Sikhs → Concentrated primarily in Punjab.

Buddhists → Maharashtra (highest concentration), Sikkim, Ladakh.

Jains → Urban areas of Rajasthan, Gujarat, and Maharashtra.

34. Identify correct statements with respect to Konkan Railway.

A. It was constructed in 1989.

B. It is a 760-km long rail route.

C. It connects Roha to Mangalore.

D. Asia's largest tunnel, which is nearly 6.5 km long, also lies on this route.

Choose the correct answer from the options given below:

- (A) A, B and D only
- (B) A, B and C only
- (C) A, C and D only
- (D) B, C and D only

Correct Answer: (D) B, C and D only

Solution:

Concept:

The Konkan Railway represents an extraordinary engineering milestone achieved by the Indian Railways, overcoming formidable topographical challenges across the rugged Western Ghats (Sahyadris).

It traverses difficult mountainous terrain featuring hundreds of rivers, rivulets, deep gorges, and steep mountains to provide an efficient transport corridor along the western coast.

Step 1: Analyzing the Statements on Konkan Railway:

Statement A: The construction of the Konkan Railway route was completed and officially commissioned in the year 1998 (NOT 1989). The Konkan Railway Corporation was incorporated in 1990, and the entire stretch became operational on January 26, 1998. Thus, statement A is factually incorrect.

Statement B: The total operational route length of this railway line is precisely 760 km. Hence, statement B is correct.

Statement C: The track connects Roha in Maharashtra to Thokur near Mangaluru (Mangalore) in Karnataka, traversing Maharashtra, Goa, and Karnataka. Hence, statement C is correct.

Statement D: The line boasts over 2,000 bridges and 91 tunnels, including the Karbude tunnel near Ratnagiri which is nearly 6.5 km long (one of Asia's longest tunnels at the time of construction). Thus, statement D is correct.

Step 2: Conclusion:

Statements B, C, and D are correct, while statement A is incorrect.

Final Answer:

Consequently, the correct choice is B, C and D only.

Quick Tip: Konkan Railway Key Facts:

Commissioned: 1998.

Route Length: 760 km.

Termini: Roha (Maharashtra) to Mangaluru (Karnataka).

States covered: Maharashtra, Goa, Karnataka.

Features: 6.5 km long Karbude tunnel.

35. Choose the correct statements with reference to a rise in the import of petroleum products in Indian imports.

A. Fuel demand has increased.

B. It is used not only as a fuel but also as an industrial raw material.

C. It is linked with industrialisation and urbanisation.

D. Rural India still depends on fuel-wood.

Choose the correct answer from the options given below:

(A) A, B and D only

(B) A and D only

(C) A, C and D only

(D) A, B and C only

Correct Answer: (D) A, B and C only

Solution:

Concept:

Petroleum, Oil, and Lubricants (POL) constitute the single largest component in India's import merchandise basket.

The rapid expansion of the Indian economy over recent decades has triggered a steep increase in domestic hydrocarbon consumption, necessitating larger volumes of crude oil imports from

international suppliers.

Step 1: Analyzing Reasons for Rising Petroleum Imports:

Statement A: Rapid growth in the transport sector (automobiles, aviation, and railways) and rising domestic power needs have caused overall fuel demand to surge exponentially. This directly drives petroleum imports. Hence, A is correct.

Statement B: Petroleum is not merely combusted as an energy fuel; it serves as a critical base raw material for petrochemical industries, synthetic fibers, fertilizers, plastics, pharmaceuticals, and synthetic rubber. Thus, B is correct.

Statement C: Rising petroleum imports directly reflect accelerated industrial development and urbanisation, which increase the demand for mobility, consumer goods, and electrical energy. Thus, C is correct.

Statement D: While rural dependence on fuel-wood is a domestic socio-environmental issue, it does not explain the rise in petroleum imports; rather, reliance on traditional biomass reduces commercial petroleum uptake in rural areas. Hence, D is not a causal factor for rising petroleum imports.

Step 2: Conclusion:

Statements A, B, and C provide the valid explanatory reasons for the rise in the import of petroleum products.

Final Answer:

Therefore, the correct answer is A, B and C only.

Quick Tip: Driving forces behind India's POL import growth:

1. Booming vehicular transport demand (fuel consumption).
2. Expansion of downstream petrochemical and fertilizer industries (raw material).
3. Rising urbanisation and industrial manufacturing.

36. Match LIST-I with LIST-II

LIST-I (Sub Field of Geography)		LIST-II (Interface with sister discipline)	
A.	Behavioral Geography	I.	Epidemiology
B.	Medical Geography	II.	Psychology
C.	Electoral Geography	III.	Psephology
D.	Geography of Leisure	IV.	Sociology

Choose the correct answer from the options given below:

- (A) A-IV, B-II, C-III, D-I
- (B) A-II, B-I, C-III, D-IV
- (C) A-I, B-II, C-IV, D-III
- (D) A-III, B-IV, C-I, D-II

Correct Answer: (B) A-II, B-I, C-III, D-IV

Solution:

Concept:

Human geography is an inherently interdisciplinary spatial discipline that interfaces continuously with several sister social science disciplines.

Each sub-field of human geography borrows theoretical constructs, behavioral insights, and empirical analytical methods from a corresponding sister academic discipline.

Step 1: Matching Sub-fields with Sister Disciplines:

- Behavioral Geography (A): Examines how human individuals perceive, cognitive-map, and respond to spatial environments. It interfaces directly with Psychology (II).
- Medical Geography (B): Investigates the spatial patterns of disease outbreaks, health distribution, and healthcare access. It interfaces directly with Epidemiology (I).
- Electoral Geography (C): Studies the spatial aspects of voting behavior, constituency delimitations, and electoral outcomes. It interfaces directly with Psephology (III), the science of elections and voting.
- Geography of Leisure (D): Analyzes spatial patterns of tourism, recreation, and cultural leisure activities. It interfaces directly with Sociology (IV).

Step 2: Consolidating the Pairs:

The matching pairs are:

A → II, B → I, C → III, D → IV.

This corresponds to Option (B).

Final Answer:

Therefore, the correct match is A-II, B-I, C-III, D-IV.

Quick Tip: Sub-field interfaces in Human Geography (NCERT Table):

Behavioral Geography ↔ Psychology.

Medical Geography ↔ Epidemiology.

Electoral Geography ↔ Psephology.

Geography of Leisure ↔ Sociology.

Historical Geography ↔ History.

37. Match LIST-I with LIST-II

LIST-I (Sub Field of Geography)		LIST-II (Interface with sister discipline)	
A.	Behavioral Geography	I.	Epidemiology
B.	Medical Geography	II.	Psychology
C.	Electoral Geography	III.	Psephology
D.	Geography of Leisure	IV.	Sociology

Choose the correct answer from the options given below:

- (A) A-IV, B-II, C-I, D-III
- (B) A-IV, B-II, C-III, D-I
- (C) A-II, B-IV, C-I, D-III
- (D) A-II, B-IV, C-III, D-I

Correct Answer: (D) A-II, B-IV, C-III, D-I

Solution:

Concept:

The concept of human development, pioneered by Dr. Mahbub-ul-Haq and Prof. Amartya Sen, rests firmly on four foundational pillars.

Just as a building requires sturdy pillars to stand, human development requires equity, sustainability, productivity, and empowerment to be meaningful and inclusive.

Step 1: Matching Pillars with Their Definitions:

1. Equity (A): Refers to making equal access to opportunities available to everybody regardless of their gender, race, income, or social caste. Thus, A matches with II.
2. Sustainability (B): Means continuity in the availability of opportunities across generations. Each generation must use resources responsibly without compromising future generations' options. Thus, B matches with IV.
3. Productivity (C): Refers to human labour productivity or work efficiency. Enhancing human capabilities through education, knowledge, and health creates better productive outcomes. Thus, C matches with III.
4. Empowerment (D): Means having the power to make choices. Such power comes from increasing freedom and capability, especially for socially and economically disadvantaged groups. Thus, D matches with I.

Step 2: Formulating the Match Combination:

The resulting correspondence is:

$A \rightarrow \text{II}, B \rightarrow \text{IV}, C \rightarrow \text{III}, D \rightarrow \text{I}.$

Final Answer:

Hence, the correct option is A-II, B-IV, C-III, D-I.

Quick Tip: Four Pillars of Human Development:

1. Equity: Equal access to opportunities (gender/caste neutral).
2. Sustainability: Continuity of opportunities across generations.
3. Productivity: Human work efficiency and capabilities.
4. Empowerment: Power and freedom to make choices.

38. Match LIST-I with LIST-II

LIST-I (Type of Port)		LIST-II (Name of Port)	
A.	Oil Port	I.	Maracaibo
B.	Port of Call	II.	Rotterdam
C.	Entrepot Ports	III.	Honolulu
D.	Naval Port	IV.	Kochi

Choose the correct answer from the options given below:

- (A) A-I, B-III, C-II, D-IV
(B) A-I, B-III, C-IV, D-II
(C) A-III, B-IV, C-II, D-I
(D) A-III, B-IV, C-I, D-II

Correct Answer: (A) A-I, B-III, C-II, D-IV

Solution:

Concept:

Ports are specialized oceanic gateways that facilitate international sea-borne commerce and passenger transit.

Depending on their primary operational function, cargo specialisation, and strategic role, ports are classified into distinct specialized functional categories.

Step 1: Functional Port Classifications and Matching:

1. Oil Port (A): These ports specialize in handling, processing, and bulk shipping of crude oil and petroleum products. Maracaibo in Venezuela is a quintessential oil port located on Lake Maracaibo. Thus, A matches with I.
2. Port of Call (B): These ports originally developed along major sea routes as intermediate calling points where commercial ships could anchor for refueling, watering, and taking on food provisions. Honolulu in Hawaii (Pacific Ocean) is a classic port of call. Thus, B matches with III.
3. Entrepot Port (C): These are collection and redistribution centers where goods are imported from various nations and then re-exported without paying customs duties. Rotterdam in the Netherlands is one of the world's greatest entrepot ports. Thus, C matches with II.

4. Naval Port (D): Ports of strategic military significance that accommodate naval warships and provide maintenance and naval repair yards. Kochi (Cochin) in India serves as a premier southern naval command port. Thus, D matches with IV.

Step 2: Verifying the Combination:

The resulting pair set is: A-I, B-III, C-II, D-IV.

Final Answer:

Therefore, the correct answer is A-I, B-III, C-II, D-IV.

Quick Tip: NCERT Port Types and Examples:

Oil Ports: Maracaibo (Venezuela), Tripoli (Lebanon), Abadan (Iran).

Ports of Call: Honolulu, Aden, Singapore.

Entrepot Ports: Rotterdam, Singapore, Copenhagen.

Naval Ports: Kochi, Karwar.

39. Match LIST-I with LIST-II

LIST-I (Type of Port)		LIST-II (Name of Port)	
A.	Oil Port	I.	Maracaibo
B.	Port of Call	II.	Rotterdam
C.	Entrepot Ports	III.	Honolulu
D.	Naval Port	IV.	Kochi

Choose the correct answer from the options given below:

- (A) A-I, B-II, C-III, D-IV
- (B) A-III, B-II, C-I, D-IV
- (C) A-I, B-II, C-IV, D-III
- (D) A-III, B-IV, C-I, D-II

Correct Answer: (D) A-III, B-IV, C-I, D-II

Solution:

Concept:

Air transport represents the fastest mode of intercontinental and domestic passenger and high-value cargo transit.

Major global metropolitan centers act as primary aviation nodes hosting world-renowned international airports that connect diverse hemispheric air corridors.

Step 1: Identifying Airport Locations and Countries:

1. Montreal (A): Montreal (home to Pierre Elliott Trudeau International Airport and the headquarters of the International Civil Aviation Organization - ICAO) is a major metropolis in Canada. Thus, A matches with III.
2. Madrid (B): Madrid (served by Adolfo Suárez Madrid-Barajas Airport) is the historic capital and largest city of Spain. Thus, B matches with IV.
3. Bangkok (C): Bangkok (served by Suvarnabhumi and Don Mueang International Airports) is the capital city and primary aviation hub of Thailand. Thus, C matches with I.
4. Perth (D): Perth (served by Perth Airport) is the major commercial hub of Western Australia along the Indian Ocean coast. Thus, D matches with II.

Step 2: Assembling the Matching Sequence:

The matching alignment is:

$A \rightarrow \text{III}, B \rightarrow \text{IV}, C \rightarrow \text{I}, D \rightarrow \text{II}.$

This aligns with Option (D).

Final Answer:

Hence, the correct option is A-III, B-IV, C-I, D-II.

Quick Tip: Major Global Airports and Countries:

Montreal $\rightarrow$ Canada

Madrid $\rightarrow$ Spain

Bangkok $\rightarrow$ Thailand

Perth $\rightarrow$ Australia

40. Match LIST-I with LIST-II

LIST-I (Characteristic)		LIST-II (Thought)	
A.	Perspective that contemporary social problems are related to the development of capitalism	I.	Welfare Geography
B.	Study of social well-being of people like housing, health and education	II.	Radical School of thought
C.	Study of human activities which make use of opportunities provided by nature and thus cause humanization of nature	III.	Behavioural School of thought
D.	Study of lived experience and perceptions of space by social categories based on religion, race and ethnicity	IV.	Possibilism

Choose the correct answer from the options given below:

- (A) A-I, B-II, C-III, D-IV
 (B) A-III, B-II, C-I, D-IV
 (C) A-II, B-I, C-IV, D-III
 (D) A-III, B-IV, C-I, D-II

Correct Answer: (C) A-II, B-I, C-IV, D-III

Solution:

Concept:

Human geography encompasses various philosophical paradigms and theoretical perspectives that have emerged to explain the spatial interactions between humans, nature, and social structures.

Recognizing the key tenets of these schools of thought allows geographers to understand how distinct intellectual movements conceptualize human welfare, perception, and agency.

Step 1: Matching Characteristics with Schools of Thought:

- Perspective that contemporary social problems are related to the development of capitalism
 (A): This structural critique is the core foundation of the Radical School of Thought (II), which utilizes Marxian theory to address poverty, exploitation, and inequality. Thus, A matches with II.

2. Study of social well-being of people like housing, health and education (B): Focuses on the spatial aspects of quality of life and distribution of social goods. This constitutes Welfare Geography (I). Thus, B matches with I.
3. Study of human activities which make use of opportunities provided by nature and thus cause humanization of nature (C): This is the defining premise of Possibilism (IV), which posits that nature sets bounds and offers possibilities for human choice. Thus, C matches with IV.
4. Study of lived experience and perceptions of space by social categories based on religion, race and ethnicity (D): Emphasizes cognitive processes, mental maps, and subjective individual perceptions, which forms the Behavioural School of Thought (III). Thus, D matches with III.

Step 2: Conclusion:

The resulting sequence is: A-II, B-I, C-IV, D-III.

Final Answer:

Therefore, the correct answer is A-II, B-I, C-IV, D-III.

Quick Tip: Core definitions in Geographic Thought:

Radical School → Capitalism, social problems, Marxian theory.

Welfare Geography → Social well-being, housing, health, education.

Possibilism → Humanization of nature, human choice over natural limits.

Behavioural School → Lived experience, perception of space.

Read the following passage and answer the questions that follow (Questions 41 to 45):

Concept of High Technology Industry

High technology, or simply high-tech, is the latest generation of manufacturing activities. It is best understood as the application of intensive research and development (R and D) efforts leading to the manufacture of products of an advanced scientific and engineering character. Professional (white collar) workers make up a large share of the total workforce. These highly skilled specialists greatly outnumber the actual production (blue collar) workers. Robotics on the assembly line, computer-aided design (CAD) and manufacturing, electronic controls of smelting and refining processes, and the constant development of new chemical and pharmaceutical products are notable

examples of a high-tech industry. Neatly spaced, low, modern, dispersed, office-plant-lab buildings rather than massive assembly structures, factories and storage areas mark the high-tech industrial landscape. Planned business parks for high-tech start-ups have become part of regional and local development schemes. High-tech industries which are regionally concentrated, self-sustained and highly specialized are called technopolies. The Silicon Valley near San Francisco and Silicon Forest near Seattle are examples of technopolies.

41. Which type of workers make up a large share of the total workforce in the high technology industry?

- (A) Red collar
- (B) White collar
- (C) Blue collar
- (D) Golden collar

Correct Answer: (B) White collar

Solution:

Concept:

In industrial geography and labour economics, the occupational structure of manufacturing industries is traditionally classified using collar-color designations.

Traditional heavy industries rely predominantly on manual production workers ("blue-collar" workers).

In contrast, advanced science-driven industries rely on specialized knowledge professionals, researchers, and engineers ("white-collar" workers).

Step 1: Information Provided in the Comprehension Passage:

The passage explicitly states:

"Professional (white collar) workers make up a large share of the total workforce. These highly skilled specialists greatly outnumber the actual production (blue collar) workers."

Step 2: Analysis of Occupational Roles:

High-technology manufacturing is anchored on intense scientific research and development,

software development, circuit architecture, and precision design.

Consequently, the majority of the personnel are research scientists, software engineers, data analysts, and executive planners who fall under the white-collar classification.

Final Answer:

Therefore, professional White collar workers make up a large share of the total workforce in high-tech industries.

Quick Tip: Labour terminology in geography:

White collar → Professional, technical, managerial workers (predominant in high-tech).

Blue collar → Manual production/assembly line workers.

Red collar → Primary sector workers.

Gold collar → High-level executive and quinary decision makers.

42. Which of the following is the latest generation of manufacturing activities?

- (A) Eco-tourism
- (B) High-tech
- (C) Medical tourism
- (D) Outsourcing

Correct Answer: (B) High-tech

Solution:

Concept:

Manufacturing activities have evolved through progressive historical epochs, transitioning from manual cottage handicrafts and steam-powered Industrial Revolution factories to modern high-technology automated facilities.

High-technology manufacturing represents the most modern technological phase of industrial production.

Step 1: Direct Passage Reference:

The opening sentence of the provided passage affirms:

"High technology, or simply high-tech, is the latest generation of manufacturing activities."

The passage further defines it as the application of intensive research and development (R and D) efforts leading to the creation of advanced scientific and engineering goods.

Step 2: Assessing Other Options:

Eco-tourism and medical tourism are tertiary quaternary service-sector activities involving personal travel, not manufacturing activities.

Outsourcing is an operational business strategy common across services and data processing, not a distinct generational category of manufacturing.

Final Answer:

Thus, High-tech represents the latest generation of manufacturing activities.

Quick Tip: Direct comprehension extract:

"High technology, or simply high-tech, is the latest generation of manufacturing activities."

43. Which of the following is NOT the characteristic of the high technology industries?

- (A) Highly skilled specialised workforce
- (B) Robotics on the assembly line
- (C) Computer-Aided Design
- (D) Massive industrial structures and storages

Correct Answer: (D) Massive industrial structures and storages

Solution:

Concept:

The physical morphology and technological characteristics of high-tech industries differ sharply from conventional heavy smoke-stack industrial manufacturing.

High-tech facilities prioritize modularity, clean environments, computerized workflows, and low-density business parks rather than massive, sprawling factories.

Step 1: Passage Description of High-Tech Characteristics:

The passage details several distinct characteristics of high-tech industry:

1. Workforce: Highly skilled specialists outnumber production workers.
2. Technological processes: Utilization of robotics on assembly lines, Computer-Aided Design (CAD), and computer-aided manufacturing.
3. Built environment: "Neatly spaced, low, modern, dispersed, office-plant-lab buildings rather than massive assembly structures, factories and storage areas mark the high-tech industrial landscape."

Step 2: Identifying the False Characteristic:

The passage clearly notes that high-tech industries avoid massive assembly structures, factories, and storage areas.

Massive industrial structures and bulk raw-material storage are typical hallmarks of traditional heavy industries like iron and steel plants.

Final Answer:

Therefore, Massive industrial structures and storages is NOT a characteristic of high technology industries.

Quick Tip: Landscape of High-Tech vs Heavy Industry:

High-Tech → Neatly spaced, modern, dispersed office-plant-lab buildings, business parks.

Traditional Heavy Industry → Sprawling massive factories, smokestacks, and extensive storage yards.

44. High-tech industries which are regionally concentrated, self-sustained and highly specialised are called:

- (A) Minneapolis
- (B) Technopolies
- (C) Metropolis
- (D) Megalopolis

Correct Answer: (B) Technopolies

Solution:

Concept:

Industrial agglomeration often leads to specialized regional clusters where advanced research institutions, venture capitalists, and manufacturing laboratories coalesce.

When high-technology firms concentrate geographically into self-sustaining innovation ecosystems, geographers assign them a specific spatial nomenclature.

Step 1: Defining Technopolies from the Passage:

The comprehension passage clearly states:

"High-tech industries which are regionally concentrated, self-sustained and highly specialized are called technopolies."

Technopolies (or technopoles) act as self-contained nodes of technological development, hosting universities, high-tech firms, and incubator facilities.

Step 2: Evaluating Alternative Urban Terms:

Minneapolis is an individual city located in Minnesota, USA.

A metropolis is a very large, prominent city that serves as a regional economic and political core.

A megalopolis (coined by Jean Gottmann) refers to an extensive urban conurbation formed by the coalescing of multiple metropolitan regions.

Final Answer:

Consequently, such specialized high-tech agglomerations are termed Technopolies.

Quick Tip: Definition:

Technopoly / Technopole = Regionally concentrated, self-sustained, highly specialized high-tech manufacturing and research complex.

Examples: Silicon Valley, Silicon Forest.

45. Silicon Forest technopolies is located in which country?

- (A) USA
- (B) France
- (C) Germany
- (D) Japan

Correct Answer: (A) USA

Solution:

Concept:

Technopolies have emerged across various developed industrialized nations, serving as drivers of the modern digital and knowledge economy.

The United States of America possesses some of the most globally renowned high-technology industrial regions and clusters.

Step 1: Textual Evidence from the Passage:

The passage concludes by highlighting major real-world examples:

"The Silicon Valley near San Francisco and Silicon Forest near Seattle are examples of technopolies."

Step 2: Geographic Localization:

San Francisco is a world-famous city located in the state of California, USA.

Seattle is a major metropolitan center located in the Pacific Northwest state of Washington, USA.

The high-tech cluster surrounding Seattle is colloquially and geographically designated as

"Silicon Forest".

Both San Francisco and Seattle are situated in the United States of America (USA).

Final Answer:

Therefore, the Silicon Forest technopoly is located in the USA.

Quick Tip: Famous American Technopolies:

Silicon Valley → Near San Francisco, California (USA).

Silicon Forest → Near Seattle / Portland, Pacific Northwest (USA).

Read the following passage and answer the questions that follow (Questions 46 to 50):

Rail Transport

The Indian Railways network is one of the longest in the world. It facilitates the movement of both freight and passengers and contributes to the growth of the economy. Mahatma Gandhi said, the Indian railways "...brought people of diverse cultures together to contribute to India's freedom struggle". The Indian Railway was introduced in 1853, when a line was constructed from Bombay to Thane, covering a distance of 34 km. Indian Railways is the largest government undertaking in the country. The length of the Indian Railways network was 67,956 km (Railway yearbook 2019-20). Its very large size puts a lot of pressure on a centralised railway management system. Thus, in India, the railway system has been divided into 17 zones. Indian Railways has launched an extensive programme to convert the metre and narrow gauges to broad gauge. Moreover, steam engines have been replaced by diesel and electric engines. This step has increased the speed, as well as the haulage capacity. The replacement of steam engines run by coal has also improved the environment of the stations. Metro rail has revolutionised the urban transport system in India. Replacement of diesel buses by CNG-run vehicles along with the introduction of the metro is a welcome step towards controlling the air pollution in urban centres. Areas around towns, raw material producing areas and plantations and other commercial crops, hill stations and cantonment towns were well-connected by railways from the British colonial era. These were mostly developed for the exploitation of resources. After the Independence of the country, railway routes have been extended to other areas too. The most significant development has been the development of the Konkan Railway along the western coast, providing a direct link between Mumbai and Mangaluru. The railway continues to remain

the main means of transport for the masses. The railway network is relatively less dense in the hill states, north eastern states, central parts of India and Rajasthan.

46. The Indian Railway was introduced in 1853 between which two places?

- (A) Bombay to Thane
- (B) Bombay to Pune
- (C) Bombay to Nagpur
- (D) Delhi to Kanpur

Correct Answer: (A) Bombay to Thane

Solution:

Concept:

The introduction of railways represents the most transformative event in the history of mechanized inland transportation in India.

The railway network was introduced by the British administration primarily to move raw materials to port cities, facilitate military deployment, and distribute manufactured imported goods.

Step 1: Information Provided in the Passage:

The passage explicitly mentions:

"The Indian Railway was introduced in 1853, when a line was constructed from Bombay to Thane, covering a distance of 34 km."

Step 2: Historical Context:

The historic maiden passenger train journey in India operated on April 16, 1853, between Bori Bunder (Bombay) and Thane.

The train was hauled by three steam locomotives named Sahib, Sindh, and Sultan, traversing a track distance of 34 kilometers.

Final Answer:

Therefore, Indian Railways was introduced in 1853 between Bombay and Thane.

Quick Tip: First Railway Line in India:

Year: 1853 (April 16).

Route: Bombay (Bori Bunder) to Thane.

Distance: 34 km.

47. In Indian Railways, which of the following gauges has the longest total length of tracks?

- (A) Broad gauge
- (B) Standard gauge
- (C) Metre gauge
- (D) Narrow gauge

Correct Answer: (A) Broad gauge

Solution:

Concept:

The track gauge in railway systems refers to the clear minimum vertical distance between the inner faces of the two running rails.

Indian Railways historically operated three distinct gauges: Broad Gauge (1.676 m), Metre Gauge (1.000 m), and Narrow Gauge (0.762 m and 0.610 m).

Step 1: Context of Gauge Conversion in India:

The passage notes:

"Indian Railways has launched an extensive programme to convert the metre and narrow gauges to broad gauge."

Under this extensive programme, known as "Project Unigauge", the Indian Railways embarked on massive nationwide track conversion.

Step 2: Track Share Analysis:

As a result of decades of persistent gauge conversion, Broad Gauge tracks currently constitute over 90% of the total route kilometer length across the Indian Railways network.

Metre and narrow gauges have been phased out across almost all trunk routes and are now restricted to a few heritage mountain lines (e.g., Kalka-Shimla, Darjeeling Himalayan Railway).

Final Answer:

Thus, the Broad gauge has the longest total length of tracks in Indian Railways.

Quick Tip: Railway Gauges in India:

Broad Gauge: 1.676 m (Accounts for > 90% of total track length).

Metre Gauge: 1.000 m.

Narrow Gauge: 0.762 m or 0.610 m (mountain/heritage railways).

48. Which of the following has revolutionised the urban transport system in India?

- (A) CNG-Buses
- (B) Electrical Vehicles
- (C) Metro rail
- (D) Bullet Train

Correct Answer: (C) Metro rail

Solution:

Concept:

Rapid urban population growth in metropolitan cities has generated severe vehicular road congestion, lengthened transit delays, and heightened atmospheric air pollution.

Mass Rapid Transit Systems (MRTS) provide high-capacity, dedicated, eco-friendly transit solutions that transform inner-city mobility.

Step 1: Direct Passage Confirmation:

The passage explicitly identifies the catalyst of urban transit transformation:

"Metro rail has revolutionised the urban transport system in India."

It also states: "Replacement of diesel buses by CNG-run vehicles along with the introduction of the metro is a welcome step towards controlling the air pollution in urban centres."

Step 2: Significance of Metro Systems:

Beginning with Kolkata and later expanding with Delhi Metro and networks in Bengaluru, Mumbai, Chennai, Hyderabad, and Kochi, metro rail has revolutionized daily urban commuting.

It offers punctual, safe, comfortable, and zero-emission travel to millions of commuters daily.

Final Answer:

Therefore, Metro rail has revolutionized the urban transport system in India.

Quick Tip: Key Comprehension Line:

"Metro rail has revolutionised the urban transport system in India."

First metro in India: Kolkata (1984).

Largest metro network: Delhi Metro.

49. Which of the following regions has dense railway network?

- (A) Hilly states
- (B) North Eastern States
- (C) Eastern Rajasthan
- (D) Ganga plains

Correct Answer: (D) Ganga plains

Solution:

Concept:

The spatial density of railway networks across India is profoundly conditioned by physiography, population density, economic resources, and level of industrialization.

Flat alluvial plains provide the most favorable physical and socioeconomic conditions for laying down dense railway tracks.

Step 1: Contrast as Described in the Passage:

The passage points out where railways are sparse:

"The railway network is relatively less dense in the hill states, north eastern states, central parts of India and Rajasthan."

Rugged relief, steep gradients, dense forest cover, and dispersed settlements create severe engineering and economic barriers in the Himalayan hill states and North Eastern region.

Step 2: Why the Ganga Plains Have a Dense Network:

In sharp contrast, the northern alluvial Ganga plains feature:

1. Vast, uniform, level plain topography requiring minimal grading, tunnels, or deep cuts.
2. Extremely high agricultural productivity and rural population density.
3. A large concentration of major commercial towns and industrial hubs.

Consequently, the Ganga plains support one of the densest railway networks in the world.

Final Answer:

Therefore, the Ganga plains have a dense railway network.

Quick Tip: Factors influencing Railway Density in India:

Dense network: Northern Plains / Ganga Plains (flat terrain, high population, intensive farming).

Sparse network: Himalayan hills, North-East states, Thar desert of Rajasthan, forested central plateaus.

50. Identify the railway zone whose headquarter is located in Bihar.

- (A) North Eastern
- (B) East Central
- (C) Eastern

(D) North Central

Correct Answer: (B) East Central

Solution:

Concept:

To ensure efficient administration, decentralized operational control, and safety across an extensive network of over 67,000 km, Indian Railways is organized into distinct administrative zones.

Each railway zone is headed by a General Manager and has its designated headquarters situated in a prominent regional city.

Step 1: Locating the Headquarters of Listed Railway Zones:

1. East Central Railway (ECR) (B): Established on October 1, 2002, its zonal headquarters is located at Hajipur in the Vaishali district of Bihar.
2. Eastern Railway (ER) (C): Its zonal headquarters is located at Fairlie Place in Kolkata, West Bengal.
3. North Eastern Railway (NER) (A): Its zonal headquarters is situated at Gorakhpur in eastern Uttar Pradesh.
4. North Central Railway (NCR) (D): Its zonal headquarters is located at Subedarganj in Prayagraj (Allahabad), Uttar Pradesh.

Step 2: Identification for Bihar:

Among all the railway zones in India, the East Central Railway is the only zone whose headquarters is situated within the state of Bihar (Hajipur).

Final Answer:

Therefore, the railway zone whose headquarter is located in Bihar is East Central.

Quick Tip: Important Railway Zones and Headquarters:

East Central Railway → Hajipur (Bihar).

Eastern Railway → Kolkata (West Bengal).

North Eastern Railway → Gorakhpur (Uttar Pradesh).

North Central Railway → Prayagraj (Uttar Pradesh).

Northern Railway → New Delhi.