CUET-UG Geography Sample Paper-8

Duration: 1 Hour **Maximum Marks: 250**

Instructions

- This paper contains a total of 50 Multiple Choice Questions.
- Each correct answer carries **+5 marks**.
- Each incorrect answer carries **-1 mark**.
- No negative marking for unattempted questions.

Q1. Which of the following best describes the interdisciplinary nature of Human Geography?

(A) It studies only physical landscapes

(B) It links human activities with spatial patterns and environmental processes

(C) It focuses exclusively on economic development

(D) It ignores cultural interactions

Q2. Who among the following is associated with the concept of Neo-determinism?

(A) Griffith Taylor

(B) Vidal de la Blache

(C) Ellen Semple

(D) Humboldt

Q3. The term “ecumene” refers to:

(A) Uninhabited polar regions

(B) Permanently inhabited areas of the Earth

(C) Areas affected by migration

(D) Regions under cultivation

Q4. Which of the following regions has the lowest carrying capacity for human settlement?

(A) Nile Valley

(B) Indo-Gangetic Plain

(C) Sahara Desert

(D) Western Europe

Q5. A country with high birth rate, declining death rate, and rapidly increasing population is likely to be in which stage of demographic transition?

(A) Stage I

(B) Stage II

(C) Stage III

(D) Stage IV

Q6. Which indicator is most closely associated with qualitative aspects of population?

(A) Crude birth rate

(B) Population density

(C) Human Development Index

(D) Arithmetic density

Q7. The highest physiological density is generally found in countries with:

(A) Vast cultivable land

(B) Low agricultural productivity

(C) Limited arable land and high population

(D) Sparse settlement

Q8. Which type of migration is most commonly associated with information technology professionals?

(A) Step migration

(B) Forced migration

(C) International skilled migration

(D) Seasonal migration

Q9. Which country has implemented a "one-child policy" in the past to control population growth?

(A) India

(B) China

(C) Indonesia

(D) Brazil

Q10. Population pyramids with broad bases and narrow tops indicate:

(A) Ageing population

(B) Stable population

(C) Expanding population

(D) Declining birth rate

Q11. Match List I with List II and choose the correct answer.

List I		List II	
A	Suez Canal	I	Atlantic-Pacific
B	Panama Canal	II	Mediterranean-Red Sea
C	WTO	III	International Trade
D	INSAT	IV	Communication Satellite

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

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

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

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

Q12. Match List I with List II and choose the correct answer.

List I		List II	
A	Green Revolution	I	Milk Production
B	White Revolution	II	Forest Conservation
C	Chipko Movement	III	Wheat and Rice
D	Blue Revolution	IV	Fish Production

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

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

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

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

Q13. Match List I with List II and choose the correct answer.

List I		List II	
A	Arithmetic Density	I	Population / Cultivable Land
B	Physiological Density	II	Population / Total Land Area
C	HDI	III	Human Development
D	Dependency Ratio	IV	Dependents / Working Population

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

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

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

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

Q14. Nomadic herding is most commonly practiced in:

(A) Equatorial forests

(B) Tundra and arid regions

(C) Coastal plains

(D) Delta regions

Q15. Which agricultural practice involves cultivation and herding on the same farm?

(A) Mixed farming

(B) Dairy farming

(C) Plantation agriculture

(D) Truck farming

Q16. The Ruhr region became an industrial hub mainly because of availability of:

(A) Petroleum and hydropower

(B) Iron ore and coal

(C) Cotton and labor

(D) Ports and fisheries

Q17. Which of the following is an example of a footloose industry?

(A) Iron and steel

(B) Shipbuilding

(C) Software industry

(D) Sugar industry

Q18. Quaternary activities are primarily related to:

(A) Extraction of raw materials

(B) Manufacturing

(C) Knowledge-based services

(D) Transport of goods

Q19. Which transport system is most economical for carrying crude oil over long distances?

(A) Railways

(B) Airways

(C) Pipelines

(D) Roadways

Q20. The Suez Canal significantly reduces travel distance between:

(A) Europe and North America

(B) Europe and Asia

(C) South America and Africa

(D) Australia and Europe

Read the passage carefully and answer the questions that follow:

A mineral-rich plateau region became one of the most important industrial belts of a country due to the abundant availability of coal, iron ore, manganese, and other mineral resources. The presence of raw materials encouraged the establishment of large steel plants, thermal power stations, heavy engineering industries, and mining operations. Over time, railways, highways, and industrial townships developed rapidly to support the transportation of minerals and finished industrial products. Major urban centers emerged around mining and industrial zones, attracting workers and businesses from different parts of the country.

Although industrialization brought economic growth and employment opportunities, it also created serious environmental and social problems. Extensive mining and deforestation damaged natural ecosystems and reduced forest cover in nearby areas. Industrial discharge polluted rivers and groundwater sources, while air pollution increased due to thermal power plants and heavy industries. Tribal communities living in forested regions were displaced because of mining projects, dams, and industrial expansion. Many traditional livelihoods based on forests and agriculture were adversely affected. The region now faces the difficult challenge of balancing industrial development with environmental conservation, sustainable resource management, and social justice for displaced communities.

Q21. Which factor mainly contributed to industrial development in the region?

(A) Fertile agricultural land

(B) Availability of minerals

(C) Tourism development

(D) Fishing activities

Q22. Which industries dominate the region?

(A) Textile industries

(B) IT industries

(C) Heavy engineering and steel industries

(D) Dairy industries

Q23. Which transport system expanded due to industrialization?

(A) Camel transport

(B) Railways and highways

(C) Ropeways only

(D) Inland waterways only

Q24. Which environmental issue is highlighted in the passage?

(A) Glacier melting

(B) Water pollution and deforestation

(C) Coral bleaching

(D) Tsunami formation

Q25. Which social issue emerged because of industrial expansion?

(A) Coastal erosion

(B) Tribal displacement

(C) Decline in trade

(D) Population decrease

Read the passage carefully and answer the questions that follow:

A developed European nation has one of the highest levels of urbanization, industrialization, and human development in the world. Most of its population lives in well-planned urban centers connected by advanced transport systems such as high-speed railways, expressways, metro networks, and efficient public transportation. The country has a diversified economy in which manufacturing, finance, information technology, healthcare, education, and other service sectors contribute significantly to national income. High standards of living, widespread literacy, and advanced healthcare systems have resulted in low birth rates, low death rates, and high life expectancy.

However, the country faces a growing demographic challenge because of its ageing population and shrinking workforce. The proportion of elderly citizens has increased steadily, leading to rising dependency ratios and labor shortages in several sectors of the economy. To address these issues, the government encourages immigration of skilled workers from developing countries and invests heavily in automation and technological innovation. Environmental sustainability is also a major national priority. Large investments are being made in renewable energy sources such as wind and solar power, sustainable urban planning, waste recycling, and public transport systems to reduce carbon emissions and improve environmental quality.

Q26. Which demographic feature is most evident in the country?

(A) Expanding population

(B) Ageing population

(C) Population explosion

(D) High infant mortality

Q27. Which sector contributes significantly to the economy?

(A) Primary sector

(B) Service sector

(C) Hunting sector

(D) Nomadic sector

Q28. Why does the country encourage immigration?

(A) To reduce literacy

(B) To increase forest cover

(C) To overcome labor shortages

(D) To promote subsistence farming

Q29. Which energy source is promoted in the passage?

(A) Coal

(B) Petroleum

(C) Renewable energy

(D) Firewood

Q30. Which demographic indicator is associated with high life expectancy?

(A) Low literacy

(B) High mortality

(C) Advanced healthcare facilities

(D) Primitive economy

Q31. Containerization has revolutionized world trade mainly by:

(A) Increasing customs duties

(B) Reducing transportation cost and time

(C) Replacing rail transport

(D) Promoting air cargo only

Q32. Which communication system is essential for global positioning and weather forecasting?

(A) Telegraph

(B) Satellite communication

(C) Inland waterways

(D) FM radio

Q33. Which of the following ports is located on the eastern coast of India?

(A) Kandla

(B) Kochi

(C) Paradip

(D) Mormugao

Q34. The Andes Mountains are located along the:

(A) Eastern coast of Africa

(B) Western coast of South America

(C) Northern coast of Australia

(D) Eastern coast of North America

Q35. Which country is known as the “Land of Rising Sun”?

(A) Thailand

(B) China

(C) South Korea

(D) Japan

Q36. The Pampas grasslands are mainly located in:

(A) Australia

(B) Argentina

(C) South Africa

(D) Russia

Q37. Which ocean current contributes significantly to the moderate climate of Western Europe?

(A) Labrador Current

(B) Canary Current

(C) Gulf Stream

(D) Oyashio Current

Q38. Which Indian state has the highest urban population in absolute numbers?

(A) Maharashtra

(B) Gujarat

(C) Tamil Nadu

(D) Karnataka

Q39. The Census of India defines literacy as the ability to:

(A) Read only

(B) Write only

(C) Read and write with understanding

(D) Speak multiple languages

Q40. Which Indian state has the lowest population density?

(A) Rajasthan

(B) Arunachal Pradesh

(C) Sikkim

(D) Himachal Pradesh

Q41. Which occupational structure dominates rural India?

(A) Primary sector

(B) Secondary sector

(C) Quaternary sector

(D) Quinary sector

Q42. Dispersed settlements are commonly found in:

(A) Fertile plains

(B) Coastal deltas

(C) Hilly and forested regions

(D) Mining belts

Q43. A megacity is generally defined as a city having population above:

(A) 1 million

(B) 5 million

(C) 10 million

(D) 20 million

Q44. Which resource is considered non-renewable?

(A) Solar energy

(B) Wind energy

(C) Coal

(D) Tidal energy

Q45. Terrace cultivation is mainly practiced to:

(A) Increase industrialization

(B) Reduce soil erosion on slopes

(C) Promote plantation agriculture

(D) Encourage mechanized farming

Q46. Which region in India is most associated with shifting cultivation?

(A) Punjab plains

(B) Western Rajasthan

(C) North-Eastern hills

(D) Gujarat coast

Q47. The Bhilai Steel Plant was established with the collaboration of:

(A) USA

(B) Germany

(C) Russia

(D) Japan

Q48. Which is the largest lignite-producing state in India?

(A) Gujarat

(B) Rajasthan

(C) Tamil Nadu

(D) Odisha

Q49. Watershed management primarily aims at:

(A) Expanding urban areas

(B) Conserving soil and water resources

(C) Increasing mining activities

(D) Reducing literacy rate

Q50. The Konkan Railway connects:

(A) Delhi and Mumbai

(B) Mumbai and Mangaluru

(C) Chennai and Kolkata

(D) Jaipur and Ahmedabad

Detailed Solutions

Q1.

Solution

Concept: The scope and methodology of Human Geography.

Solution: Human Geography is a sub-field of geography that focuses on the study of human populations, their spatial distribution, their activities, their relationship with the environment, and the spatial organization of societies. It is inherently interdisciplinary, drawing upon concepts and methods from sociology, anthropology, economics, political science, history, and environmental science. The discipline seeks to understand not just where human phenomena occur, but why they occur there, and how they interact with their surroundings.

Let's analyze the options:

- **(A) It studies only physical landscapes:** This describes Physical Geography, not Human Geography.
- **(B) It links human activities with spatial patterns and environmental processes:** This is the core of Human Geography. It examines how human actions are distributed across space, how these patterns are shaped by environmental factors, and how human activities, in turn, alter the environment.
- **(C) It focuses exclusively on economic development:** While economic geography is a significant part of Human Geography, the discipline is much broader and includes cultural, social, political, and historical aspects.
- **(D) It ignores cultural interactions:** Cultural geography is a major component of Human Geography, studying the spatial distribution and diffusion of cultures, languages, religions, and traditions.

Therefore, the best description of the interdisciplinary nature of Human Geography is its linkage of human activities with spatial patterns and environmental processes.

Final Answer : It links human activities with spatial patterns and environmental processes

Answer: (B)

Q2.

Solution

Concept: Evolution of geographical thought on human-environment relationships, specifically Neo-Determinism.

Solution: The relationship between humans and their environment has been a central theme in geography, evolving through several theoretical stages.

- **Environmental Determinism:** (e.g., Ellen Semple, Ellsworth Huntington) Posited that the physical environment rigidly determined human cultures and activities.
- **Possibilism:** (e.g., Vidal de la Blache) Argued that the environment offers a range of possibilities, and humans choose from them based on their culture and technology.
- **Neo-Determinism (or Probabilism):** This concept, often associated with Griffith Taylor, sought a middle ground. Taylor, an Australian geographer, proposed that the environment sets limits and possibilities, but human response is not deterministic; rather, it's probabilistic. He suggested that while nature provides opportunities and constraints, humans can choose their path within these limits, but they must respect the laws of nature. He often used the analogy of "stop, look, and listen" before proceeding, implying that humans should understand environmental conditions and act accordingly.

Let's examine the other figures:

- **(B) Vidal de la Blache:** Associated with Possibilism.
- **(C) Ellen Semple:** A proponent of Environmental Determinism.
- **(D) Humboldt:** Alexander von Humboldt was a pioneering figure in physical geography and biogeography, but not primarily associated with the specific development of determinism or neo-determinism in the human-environment context as later geographers.

Therefore, Griffith Taylor is the geographer most associated with Neo-Determinism.

Final Answer : Griffith Taylor

Answer: (A)

Q3.

Solution

Concept: Understanding geographical terms related to human settlement and land use.

Solution: The term “ecumene” (from Greek "oikoumenē," meaning "inhabited world") refers to the permanently inhabited areas of the Earth’s surface. It distinguishes these regions from uninhabited or sparsely inhabited areas like deserts, ice caps, high mountains, and dense forests. The ecumene represents those parts of the globe where humans have established permanent settlements and are actively engaged in modifying the landscape for living and economic purposes.

Let’s break down the options:

- **(A) Uninhabited polar regions:** These are areas outside the ecumene.
- **(B) Permanently inhabited areas of the Earth:** This is the precise definition of the ecumene.
- **(C) Areas affected by migration:** Migration can occur in both inhabited and uninhabited areas, and the term ecumene focuses on permanent habitation, not temporary movement.
- **(D) Regions under cultivation:** While cultivation occurs within the ecumene, the ecumene itself is a broader concept encompassing all permanently settled areas, not just agricultural ones.

Thus, the ecumene refers to the permanently inhabited parts of the Earth.

Final Answer : Permanently inhabited areas of the Earth

Answer: (B)

Q4.

Solution

Concept: Carrying capacity of different geographical regions for human settlement.

Solution: Carrying capacity refers to the maximum population size that an environment can sustain indefinitely, given the available resources and services of that ecosystem. Regions with abundant resources like fertile land, water, and a favorable climate generally have a higher carrying capacity for human settlement than regions with scarce resources or harsh environmental conditions.

Let's assess the carrying capacity of the given regions:

- **(A) Nile Valley:** This is a highly fertile river valley in an otherwise arid region (Egypt). It has a very high carrying capacity due to abundant water and fertile land for intensive agriculture.
- **(B) Indo-Gangetic Plain:** This is one of the most fertile and densely populated regions in the world, watered by major rivers like the Ganges and Indus. It has a very high carrying capacity for agriculture and human settlement.
- **(C) Sahara Desert:** This is one of the largest hot deserts in the world, characterized by extreme aridity, high temperatures, and very scarce water resources. Its carrying capacity for human settlement is extremely low, with settlements typically confined to oases or areas with access to groundwater.
- **(D) Western Europe:** This region has a temperate climate, fertile soils in many areas, access to water, and advanced technology, supporting a high population density and a high carrying capacity.

Comparing these, the Sahara Desert has the lowest carrying capacity for human settlement due to its extreme aridity and lack of basic resources.

Final Answer : Sahara Desert

Answer: (C)

Q5.

Solution

Concept: Understanding the stages of the Demographic Transition Theory.

Solution: The Demographic Transition Theory describes the population changes a country undergoes as it develops economically and socially. The stages are characterized by specific patterns of birth rates and death rates:

- **Stage I (High Stationary):** High birth rate, high death rate; low population growth.
- **Stage II (Early Expanding):** High birth rate, declining death rate; rapidly increasing population.
- **Stage III (Late Expanding):** Declining birth rate, low death rate; slowing population growth.
- **Stage IV (Low Stationary):** Low birth rate, low death rate; stable or very slow population growth.

The question describes a country with a high birth rate, declining death rate, and rapidly increasing population. This is the hallmark of Stage II of the Demographic Transition. During this stage, improvements in healthcare, sanitation, and food supply lead to a significant drop in mortality, while birth rates remain high due to traditional social norms, leading to a population boom.

Final Answer : Stage II

Answer: (B)

Q6.

Solution

Concept: Distinguishing demographic indicators, particularly those reflecting population quality.

Solution: Demographic indicators can be broadly classified into quantitative and qualitative aspects. Quantitative indicators measure the size, distribution, and structure of a population in numerical terms. Qualitative indicators, on the other hand, assess the characteristics, well-being, and capabilities of the population.

Let's examine the options:

- **(A) Crude birth rate:** This is a quantitative measure of the number of births per 1,000 people in a population in a given year.
- **(B) Population density:** This is a quantitative measure of the number of people per unit area. Arithmetic density is a specific type of population density.
- **(C) Human Development Index (HDI):** The HDI is a composite index that measures key aspects of human development, including life expectancy (health), education (knowledge), and per capita income (standard of living). These are qualitative aspects of well-being and capabilities, reflecting the quality of life and development of a population, not just its numbers or density.
- **(D) Arithmetic density:** This is a quantitative measure (population per unit area).

Therefore, the Human Development Index is most closely associated with the qualitative aspects of a population.

Final Answer : Human Development Index

Answer: (C)

Q7.

Solution

Concept: Understanding physiological density and its interpretation.

Solution: Physiological density is a measure that relates the total population of a region to its arable land area. It is calculated as:

$$\text{Physiological Density} = \frac{\text{Total Population}}{\text{Arable Land Area}}$$

This indicator gives a better understanding of the pressure of population on the land that can actually support it through agriculture. A high physiological density generally suggests that a country has a large population relative to its limited arable land, indicating significant pressure on agricultural resources.

Let's analyze the options:

- **(A) Vast cultivable land:** If a country has vast cultivable land, even with a large population, its physiological density would be lower because the denominator (arable land) is large.
- **(B) Low agricultural productivity:** Low productivity might lead to food shortages but doesn't directly define physiological density, which is about population relative to arable land, not productivity per se.
- **(C) Limited arable land and high population:** This scenario directly leads to a high physiological density. A large numerator (high population) combined with a small denominator (limited arable land) results in a very high ratio.
- **(D) Sparse settlement:** Sparse settlement implies a low population density, which would likely result in a lower physiological density, assuming arable land is available.

Therefore, the highest physiological density is generally found in countries with limited arable land and high population.

Final Answer : Limited arable land and high population

Answer: (C)

Q8.

Solution

Concept: Types of migration, particularly those driven by professional skills.

Solution: Migration can be categorized based on various factors, including the reason for moving (voluntary vs. forced), the distance (internal vs. international), and the duration (temporary vs. permanent). Information technology (IT) professionals typically possess specialized skills that are in demand globally. When these individuals move from one country to another for employment in the IT sector, it is a form of international skilled migration. This type of migration is voluntary, driven by economic opportunities and the demand for specific expertise.

Let's examine the other options:

- **(A) Step migration:** This refers to migration that occurs in stages, often from a rural area to a town, then to a city, and finally to an international destination. It's a pattern, not a type defined by profession.
- **(B) Forced migration:** This occurs when people are compelled to move due to threats or coercion, such as war, persecution, or natural disasters. IT professionals usually move voluntarily.
- **(D) Seasonal migration:** This is temporary migration for work that is tied to agricultural seasons or specific industries with seasonal labor needs, not typically associated with IT professionals.

International skilled migration best describes the movement of IT professionals across borders for employment.

Final Answer : International skilled migration

Answer: (C)

Q9.

Solution

Concept: Population control policies implemented by countries.

Solution: Many countries have implemented population control policies to manage population growth rates. The "one-child policy" was a particularly famous and strict policy implemented by the government of the People's Republic of China. Introduced in 1979, its aim was to curb rapid population growth. While effective in limiting births, it also led to significant social and demographic consequences, such as an aging population and gender imbalance. The policy was eventually relaxed and later abolished.

Let's consider the other options:

- **(A) India:** India has implemented family planning programs but has not had a strict, enforced "one-child policy."
- **(C) Indonesia:** Indonesia has had family planning programs, but not a one-child policy.
- **(D) Brazil:** Brazil has generally not had restrictive population control policies.

China is the country famously associated with the one-child policy.

Final Answer : China

Answer: (B)

Q10.

Solution

Concept: Interpreting population pyramids based on their shape.

Solution: A population pyramid is a graphical representation of the age and sex distribution of a population. The shape of the pyramid provides insights into the demographic trends of a country.

- **Broad base and narrow top:** This shape indicates a high proportion of young people and a smaller proportion of older people. This is characteristic of a population with a high birth rate and a declining death rate (or a still relatively high death rate), leading to rapid population growth. This is known as an expanding population.
- **Ageing population:** A pyramid with a more rectangular shape, or even a narrower base than the middle sections, indicates a lower birth rate and longer life expectancy, leading to a larger proportion of older people.
- **Stable population:** A pyramid with roughly equal proportions of people across younger and middle age groups, tapering off at the older ages, indicates slow or zero growth.
- **Declining birth rate:** A declining birth rate would lead to a narrowing of the base of the pyramid over time, not necessarily a broad base.

Therefore, a population pyramid with a broad base and a narrow top signifies an expanding population due to high birth rates and a growing number of young people relative to the elderly.

Final Answer : Expanding population

Answer: (C)

Q11.

Solution

Concept: Matching geographical and organizational entities with their descriptions.

Solution: We need to match each item in List I with its correct description in List II.

- **A. Suez Canal:** This vital waterway connects the Mediterranean Sea to the Red Sea, significantly shortening the sea route between Europe and Asia. Thus, it connects the Mediterranean-Red Sea (II).
- **B. Panama Canal:** This artificial canal connects the Atlantic Ocean and the Pacific Ocean through the Isthmus of Panama. Thus, it connects Atlantic-Pacific (I).
- **C. WTO (World Trade Organization):** This international organization is dedicated to regulating global trade rules. Thus, it is related to International Trade (III).
- **D. INSAT (Indian National Satellite System):** This is a series of multipurpose satellites launched by India for telecommunications, broadcasting, meteorology, and search and rescue. It is an example of a Communication Satellite (IV).

Therefore, the correct matching is A-II, B-I, C-III, D-IV.
Let's check the options:

- **(A) A-II, B-I, C-III, D-IV:** This matches our deductions.
- **(B) A-I, B-II, C-IV, D-III:** Incorrect matching.
- **(C) A-II, B-IV, C-I, D-III:** Incorrect matching.
- **(D) A-IV, B-I, C-II, D-III:** Incorrect matching.

Final Answer : A-II, B-I, C-III, D-IV

Answer: (A)

Q12.

Solution

Concept: Matching agricultural revolutions and movements with their respective focuses.

Solution: We need to match each item in List I with its corresponding item in List II.

- **A. Green Revolution:** This agricultural development program was primarily aimed at increasing the production of staple food grains, especially Wheat and Rice (III), through the use of high-yielding varieties and modern farming techniques.
- **B. White Revolution:** Also known as Operation Flood, this revolution focused on increasing Milk Production (I) in India, making it the world's largest producer of milk.
- **C. Chipko Movement:** This was a forest conservation movement that originated in Uttarakhand, India, where local people, particularly women, hugged trees to prevent them from being felled. Its primary focus was Forest Conservation (II).
- **D. Blue Revolution:** This refers to advancements in aquaculture and the development of the fisheries sector, aimed at increasing Fish Production (IV).

Therefore, the correct matching is A-III, B-I, C-II, D-IV.
Let's check the options:

- **(A) A-III, B-I, C-II, D-IV:** This matches our deductions.
- **(B) A-I, B-II, C-IV, D-III:** Incorrect matching.
- **(C) A-II, B-IV, C-I, D-III:** Incorrect matching.
- **(D) A-IV, B-I, C-II, D-III:** Incorrect matching.

Final Answer : A-III, B-I, C-II, D-IV

Answer: (A)

Q13.

Solution

Concept: Matching demographic and economic terms with their definitions or components.

Solution: We need to match each term in List I with its correct definition or component in List II.

- **A. Arithmetic Density:** This is the basic measure of population density, calculated as the total population divided by the Total Land Area (II).
- **B. Physiological Density:** This density measure relates the total population to the amount of arable or cultivable land. It is calculated as Population / Cultivable Land (I).
- **C. HDI (Human Development Index):** This composite index is used to measure a country's level of Human Development (III), considering health, education, and standard of living.
- **D. Dependency Ratio:** This demographic ratio compares the number of dependents (typically those too young or too old to work) to the working-age population. It is calculated as (Young Population + Old Population) / Working Population (IV).

Therefore, the correct matching is A-II, B-I, C-III, D-IV.
Let's check the options:

- **(A) A-II, B-I, C-III, D-IV:** This matches our deductions.
- **(B) A-I, B-II, C-IV, D-III:** Incorrect matching.
- **(C) A-II, B-IV, C-I, D-III:** Incorrect matching.
- **(D) A-IV, B-I, C-II, D-III:** Incorrect matching.

Final Answer : A-II, B-I, C-III, D-IV

Answer: (A)

Q14.

Solution

Concept: Types of economic activities and their typical geographical locations.

Solution: Nomadic herding, also known as pastoral nomadism, is a traditional economic activity where people move with their herds of animals (like cattle, sheep, goats, camels, reindeer) from one grazing area to another in search of fresh pasture and water. This practice is typically found in regions that cannot support settled agriculture due to harsh environmental conditions.

Let's consider the options:

- **(A) Equatorial forests:** These regions are characterized by dense vegetation and high rainfall, supporting sedentary agriculture or forestry, not nomadic herding.
- **(B) Tundra and arid regions:** These environments are characterized by limited vegetation and extreme conditions (cold in tundra, dry in arid regions). Nomadic herding is well-suited here, as animals can graze on sparse vegetation, and people can follow migratory routes for survival. Examples include the Saami herders in Arctic tundra and pastoralists in the deserts of Central Asia and Africa.
- **(C) Coastal plains:** These are often fertile areas suitable for agriculture or fishing, not typically for nomadic herding.
- **(D) Delta regions:** Deltas are fertile riverine areas ideal for intensive agriculture.

Nomadic herding is most commonly practiced in tundra (cold, treeless regions) and arid (dry) regions.

Final Answer : Tundra and arid regions

Answer: (B)

Q15.

Solution

Concept: Classification of agricultural practices.

Solution: Agricultural practices can be categorized based on their methods and the types of activities involved.

- **Mixed farming:** This system integrates both crop cultivation and animal husbandry on the same farm. Crops are grown to feed both humans and livestock, and animal manure is used to fertilize the crops.
- **Dairy farming:** This focuses specifically on the production of milk and milk products.
- **Plantation agriculture:** Large-scale cultivation of a single cash crop for export.
- **Truck farming:** Growing of vegetables and fruits for sale in nearby urban markets, typically over short distances.

The practice that involves both cultivation of crops and herding of animals on the same farm is mixed farming.

Final Answer : Mixed farming

Answer: (A)

Q16.

Solution

Concept: Factors influencing the location of industrial regions.

Solution: The Ruhr region in Germany became a major industrial hub primarily due to the confluence of key resources essential for heavy industry. Historically, its development was heavily reliant on the abundant deposits of iron ore and coal found in close proximity. Coal was vital for smelting iron ore and powering factories, while iron ore provided the raw material for steel production. The proximity of these resources significantly reduced transportation costs, making it an ideal location for the growth of the iron and steel industry, which in turn spurred further industrial development.

Let's analyze the other options:

- **(A) Petroleum and hydropower:** While hydropower can be a source of energy, petroleum was not the primary resource for the early industrialization of the Ruhr.
- **(C) Cotton and labor:** Cotton is not a significant natural resource of the Ruhr region; it's more associated with textile industries in other areas. While labor was available, the availability of raw materials was the primary driver.
- **(D) Ports and fisheries:** Ports are important for trade, but the Ruhr's initial growth was driven by inland resources. Fisheries are irrelevant to the heavy industry of the region.

The availability of iron ore and coal was the fundamental reason for the Ruhr region becoming an industrial hub.

Final Answer : Iron ore and coal

Answer: (B)

Q17.

Solution

Concept: Classifying industries based on their locational requirements.

Solution: Industries can be classified as raw material-oriented, market-oriented, or footloose. A footloose industry is one whose location is not tied to specific raw materials, labor pools, or markets. These industries often have low transportation costs, rely on readily available inputs, and can be located in a variety of places, often benefiting from lower land or labor costs in non-traditional industrial areas.

Let's examine the options:

- **(A) Iron and steel:** This is a raw material-oriented industry, heavily dependent on the proximity of iron ore and coal.
- **(B) Shipbuilding:** This industry is typically located near ports or coastal areas with access to shipbuilding facilities and shipping routes.
- **(C) Software industry:** The software industry is a prime example of a footloose industry. It requires highly skilled labor, but this labor can be found in many locations. The physical inputs are minimal, and the outputs (software) can be distributed electronically. Companies can locate based on factors like quality of life, tax incentives, or talent availability rather than strict resource proximity.
- **(D) Sugar industry:** This is a raw material-oriented industry, as it processes sugarcane or sugar beets, and is often located near the source of these crops.

The software industry is a classic example of a footloose industry.

Final Answer : Software industry

Answer: (C)

Q18.

Solution

Concept: Categorization of economic activities based on their nature.

Solution: Economic activities are classified into different sectors:

- **Primary Activities:** Extraction of raw materials (e.g., mining, agriculture, fishing).
- **Secondary Activities:** Manufacturing and processing of raw materials into finished goods (e.g., factories, construction).
- **Tertiary Activities:** Provision of services (e.g., transport, retail, healthcare).
- **Quaternary Activities:** These are specialized knowledge-based services that involve the collection, processing, and dissemination of information. This sector includes activities like research and development, education, consulting, financial planning, and IT services.
- **Quinary Activities:** Highest-level decision-making, often involving research and innovation at the executive level.

Quaternary activities are distinct from tertiary activities because they focus specifically on intellectual and knowledge-based services, often related to information, technology, and research.

Final Answer : Knowledge-based services

Answer: (C)

Q19.

Solution

Concept: Choosing the most economical mode of transport for specific goods.

Solution: The most economical mode of transport for carrying large quantities of bulk goods, especially over long distances, is generally pipelines. Crude oil is a prime example of a commodity that is transported in this manner. Pipelines offer very low operational costs per unit of volume once the initial high investment in construction is made. They are highly efficient for continuous, large-volume transport of liquids and gases and are less susceptible to weather disruptions compared to other modes.

Let's compare with other options:

- **(A) Railways:** Economical for bulk goods over long distances, but generally more expensive than pipelines for liquids/gases.
- **(B) Airways:** Extremely expensive and not suitable for bulk, low-value goods.
- **(D) Roadways:** Flexible but generally more expensive than rail or pipelines for long-distance bulk transport.

Pipelines are the most cost-effective method for transporting crude oil over long distances.

Final Answer : Pipelines

Answer: (C)

Q20.

Solution

Concept: The function and significance of major artificial waterways in global trade.

Solution: The Suez Canal is a vital artificial waterway that connects the **Mediterranean Sea** to the **Indian Ocean** (via the Red Sea). Its construction dramatically reduced the sea route distance between Europe and Asia. Previously, ships had to navigate around the southern tip of Africa (the Cape of Good Hope), a much longer and more time-consuming journey. By providing a direct passage between Europe and Asia, the Suez Canal significantly shortened travel times and reduced shipping costs, revolutionizing maritime trade between these two continents.

Let's consider the options:

- **(A) Europe and North America:** Connected by the Atlantic Ocean; the Suez Canal is not involved.
- **(B) Europe and Asia:** This is the correct connection provided by the Suez Canal.
- **(C) South America and Africa:** These continents are primarily connected across the Atlantic Ocean; the Suez Canal is not involved.
- **(D) Australia and Europe:** While the Suez Canal shortens the route, the primary connection it facilitates is between Europe and Asia, impacting trade to/from Australia by providing a quicker passage. However, the direct connection is between Europe and Asia.

The Suez Canal significantly reduces travel distance between Europe and Asia.

Final Answer : Europe and Asia

Answer: (B)

Q21.

Solution

Concept: Factors driving industrial development in resource-rich areas.

Solution: The passage states that the "mineral-rich plateau region became one of the most important industrial belts... due to the abundant availability of coal, iron ore, manganese, and other mineral resources." This abundance of raw materials was the primary catalyst for industrialization, as it encouraged the establishment of industries that process these minerals, such as steel plants, and industries that require these minerals as inputs, like heavy engineering.

Let's examine the other options:

- **(A) Fertile agricultural land:** While important for population support, it's not the main driver for heavy mineral-based industries.
- **(C) Tourism development:** Tourism is a service industry and does not directly lead to the establishment of heavy industries based on mineral resources.
- **(D) Fishing activities:** Fishing is relevant to coastal or riverine areas, not a plateau region's industrial driver based on minerals.

The abundant availability of minerals was the key factor driving industrial development in this region.

Final Answer : Availability of minerals

Answer: (B)

Q22.

Solution

Concept: Identifying dominant industries in a region based on resource availability and industrial focus.

Solution: The passage mentions the establishment of "large steel plants, thermal power stations, heavy engineering industries, and mining operations" due to the availability of coal, iron ore, and manganese. These are all indicative of a strong presence of heavy engineering and steel industries. These industries are resource-intensive, utilizing the abundant minerals found in the region as raw materials.

Let's consider the other options:

- **(A) Textile industries:** These industries often rely on raw materials like cotton or wool and are not directly indicated by the mineral resources mentioned.
- **(B) IT industries:** These are knowledge-based service industries, typically located in urban centers with skilled labor and good connectivity, not primarily driven by mineral availability.
- **(D) Dairy industries:** These are related to animal husbandry and agriculture, not mineral resources.

The described industrial activities strongly point to heavy engineering and steel industries dominating the region.

Final Answer : Heavy engineering and steel industries

Answer: (C)

Q23.

Solution

Concept: Infrastructure development supporting industrial and resource-based economies.

Solution: The passage states, "Over time, railways, highways, and industrial townships developed rapidly to support the transportation of minerals and finished industrial products." This clearly indicates that railways and highways expanded significantly to facilitate the movement of raw materials from mines to industries and the distribution of manufactured goods. These are crucial transport systems for resource-based industrial regions.

Let's evaluate the other options:

- **(A) Camel transport:** While used in some arid regions, it is not a primary transport system for heavy industrial goods in a modern context.
- **(C) Ropeways only:** Ropeways are used for specific purposes, often in mountainous terrain or for moving materials short distances, but not as the primary system for large-scale mineral and product transport.
- **(D) Inland waterways only:** Inland waterways are important in some regions but are not the sole or necessarily primary transport system for all industrial needs, especially in plateau regions which might not have extensive navigable rivers. Railways and highways provide broader connectivity.

Railways and highways are the transport systems that expanded to support the industrialization described.

Final Answer : Railways and highways

Answer: (B)

Q24.

Solution

Concept: Identifying environmental consequences of industrialization and resource extraction.

Solution: The passage highlights several environmental problems arising from industrial activities: "Extensive mining and deforestation damaged natural ecosystems and reduced forest cover," and "Industrial discharge polluted rivers and groundwater sources, while air pollution increased due to thermal power plants and heavy industries." Among the options, water pollution and deforestation are explicitly mentioned as significant environmental issues resulting from mining, industrial discharge, and the need for resources like timber or land.

Let's examine the other options:

- **(A) Glacier melting:** This is primarily linked to global warming and climate change, not directly to local industrial activities described.
- **(C) Coral bleaching:** This is an issue affecting marine ecosystems, particularly coral reefs, due to rising ocean temperatures and pollution. Not directly addressed in the passage about a plateau region.
- **(D) Tsunami formation:** Tsunamis are typically caused by underwater earthquakes or volcanic activity, unrelated to industrial pollution.

Water pollution and deforestation are directly identified as environmental issues in the passage.

Final Answer : Water pollution and deforestation

Answer: (B)

Q25.

Solution

Concept: Social impacts of industrial development and resource exploitation, particularly on indigenous populations.

Solution: The passage mentions that "Tribal communities living in forested regions were displaced because of mining projects, dams, and industrial expansion." This indicates that the industrial activities and infrastructure development led to the forced removal of tribal populations from their traditional lands. This displacement is a significant social issue, often resulting in loss of livelihood, cultural disruption, and social marginalization.

Let's consider the other options:

- **(A) Coastal erosion:** This is an environmental issue affecting coastlines, not a social issue arising from industrial expansion in a plateau region.
- **(C) Decline in trade:** Industrialization typically leads to an increase, not a decline, in trade, although specific traditional trades might be affected.
- **(D) Population decrease:** Industrial development usually leads to population increase due to job opportunities attracting migrants, not a decrease.

Tribal displacement is the major social issue highlighted due to industrial expansion in the region.

Final Answer : Tribal displacement

Answer: (B)

Q26.

Solution

Concept: Identifying demographic characteristics of developed nations.

Solution: The passage describes a developed European nation with "low birth rates, low death rates, and high life expectancy." It also explicitly mentions a "growing demographic challenge because of its ageing population and shrinking workforce" and that "the proportion of elderly citizens has increased steadily." These are all clear indicators of an ageing population. This demographic trend is common in developed countries where healthcare, nutrition, and living standards lead to longer lifespans, and low birth rates mean fewer young people entering the population.

Let's examine the options:

- **(A) Expanding population:** This implies high birth rates and a young population, contrary to the description.
- **(B) Ageing population:** This aligns perfectly with the passage's description of high life expectancy, low birth/death rates, and a rising proportion of elderly citizens.
- **(C) Population explosion:** This refers to a rapid increase in population, usually due to high birth rates and declining death rates, characteristic of Stage II of demographic transition, not a developed nation with low birth rates.
- **(D) High infant mortality:** High infant mortality is characteristic of less developed countries with poor healthcare, not developed nations with advanced healthcare systems.

The most evident demographic feature described is an ageing population.

Final Answer : Ageing population

Answer: (B)

Q27.

Solution

Concept: Economic structure of developed nations.

Solution: The passage describes the country's economy as "diversified" with "manufacturing, finance, information technology, healthcare, education, and other service sectors contributing significantly to national income." This indicates a highly developed economy where the service sector (which includes finance, IT, healthcare, education, etc.) plays a dominant role, alongside a strong manufacturing base (secondary sector). In developed economies, the tertiary and quaternary sectors (services and knowledge-based activities) typically employ the largest share of the workforce and contribute the most to the GDP.

Let's analyze the options:

- **(A) Primary sector:** This sector (agriculture, mining) is usually less dominant in developed, highly industrialized nations.
- **(B) Service sector:** This sector is explicitly mentioned as contributing significantly and is characteristic of developed economies.
- **(C) Hunting sector:** An archaic economic activity, irrelevant here.
- **(D) Nomadic sector:** A traditional economic activity of nomadic pastoralists, not relevant to a developed nation.

The service sector is a major contributor to the economy of this country.

Final Answer : Service sector

Answer: (B)

Q28.

Solution

Concept: Reasons for migration in developed countries facing demographic challenges.

Solution: The passage states that the country faces "labor shortages in several sectors of the economy" due to its ageing population and shrinking workforce. To address this, "the government encourages immigration of skilled workers from developing countries." Therefore, the primary reason for encouraging immigration is to overcome labor shortages and fill the gaps in the workforce caused by an ageing population.

Let's examine the other options:

- **(A) To reduce literacy:** Immigration of skilled workers would likely increase, not reduce, the overall literacy level of the workforce.
- **(B) To increase forest cover:** Immigration is related to population and workforce, not directly to forestation policies.
- **(D) To promote subsistence farming:** Developed economies typically do not rely on subsistence farming; they are industrialized and service-oriented.

The country encourages immigration to overcome labor shortages.

Final Answer : To overcome labor shortages

Answer: (C)

Q29.

Solution

Concept: Energy policies and priorities in developed nations focused on sustainability.

Solution: The passage mentions that "Environmental sustainability is also a major national priority. Large investments are being made in renewable energy sources such as wind and solar power..." This clearly indicates the country's focus on transitioning away from traditional fossil fuels towards cleaner, more sustainable energy alternatives.

Let's consider the options:

- **(A) Coal:** Coal is a fossil fuel with high carbon emissions, and developed nations are often phasing it out for environmental reasons.
- **(B) Petroleum:** Another fossil fuel, though also used for transport, it is not the promoted energy source for sustainability goals.
- **(C) Renewable energy:** Wind and solar power are explicitly mentioned as investment areas, aligning with the goal of environmental sustainability.
- **(D) Firewood:** While a traditional energy source, it is not a primary focus for large-scale energy production in developed nations aiming for advanced sustainability.

The country promotes renewable energy sources.

Final Answer : Renewable energy

Answer: (C)

Q30.

Solution

Concept: Factors influencing demographic indicators like life expectancy.

Solution: Life expectancy is the average number of years a person is expected to live. High life expectancy is a hallmark of developed countries and is directly linked to several factors that improve health and well-being. The passage mentions "high standards of living, widespread literacy, and advanced healthcare systems have resulted in low birth rates, low death rates, and high life expectancy." This indicates that advanced healthcare facilities are crucial for increasing life expectancy.

Let's examine the other options:

- **(A) Low literacy:** Low literacy is generally associated with lower standards of living and poorer health outcomes, thus lower life expectancy.
- **(B) High mortality:** High mortality rates (high death rates) would lead to a *lower* life expectancy, not higher.
- **(D) Primitive economy:** A primitive economy implies basic living standards and limited access to healthcare, which would result in lower life expectancy.

Advanced healthcare facilities are most closely associated with high life expectancy.

Final Answer : Advanced healthcare facilities

Answer: (C)

Q31.

Solution

Concept: The impact of containerization on global trade and logistics.

Solution: Containerization, the use of standardized shipping containers for the transport of goods, has been a transformative innovation in world trade. Its primary impact has been to significantly reduce transportation costs and time. By standardizing the size and handling of cargo, containers allow for efficient loading and unloading between different modes of transport (ships, trains, trucks) with minimal handling of individual items. This speed and efficiency lead to lower costs for businesses and consumers, facilitate just-in-time inventory management, and have enabled the globalization of supply chains.

Let's examine the other options:

- **(A) Increasing customs duties:** Containerization is about logistics and efficiency, not directly about customs regulations.
- **(C) Replacing rail transport:** Containerization often complements rail transport by allowing seamless transfer from ships to trains, not replacing it.
- **(D) Promoting air cargo only:** Containerization is primarily associated with maritime and land-based freight, not exclusively air cargo.

The revolution in world trade brought about by containerization is mainly due to reduced transportation costs and time.

Final Answer : Reducing transportation cost and time

Answer: (B)

Q32.

Solution

Concept: Modern communication technologies and their applications.

Solution: Satellite communication systems are a cornerstone of modern global communication and essential for specific technological applications. Satellites orbit the Earth and can relay signals over vast distances. This capability makes them indispensable for:

- **Global Positioning:** Satellite constellations like GPS (USA), GLONASS (Russia), Galileo (EU), and BeiDou (China) enable precise location determination worldwide.
- **Weather Forecasting:** Satellites equipped with sensors monitor atmospheric conditions, cloud patterns, temperature, and other meteorological data from space, providing crucial information for weather forecasts and climate monitoring.
- **Telecommunications:** Enabling international phone calls, broadcasting, and internet access in remote areas.

Other options have more limited roles:

- **(A) Telegraph:** An older communication technology, largely superseded for global applications.
- **(C) Inland waterways:** Related to transportation, not communication systems.
- **(D) FM radio:** Primarily used for broadcasting audio content over terrestrial networks.

Satellite communication is essential for global positioning and weather forecasting.

Final Answer : Satellite communication

Answer: (B)

Q33.

Solution

Concept: Major ports in India and their geographical locations.

Solution: India has a long coastline with numerous natural and artificial ports. Ports are crucial for maritime trade, facilitating the import and export of goods. We need to identify the port located on India's eastern coast.

- **(A) Kandla:** Located in Gujarat, on the western coast. It's a major port serving northern and western India.
- **(B) Kochi (Cochin):** Located in Kerala, on the southwestern coast (western coast).
- **(C) Paradip:** Located in Odisha, on the eastern coast of India. It is a major port handling bulk cargo like iron ore, coal, and fertilizers.
- **(D) Mormugao:** Located in Goa, on the western coast. It is known for its iron ore exports.

Paradip Port is situated on the eastern coast of India.

Final Answer : Paradip

Answer: (C)

Q34.

Solution

Concept: Major mountain ranges and their geographical locations on continents.

Solution: The Andes Mountains form a continuous chain of highlands along the western edge of South America. This mountain range stretches for about 7,000 kilometers (4,300 miles) from Venezuela in the northwest to Patagonia in the south, making it the longest continental mountain range in the world. It runs along the entire western coast of South America, influencing the climate and geography of countries like Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile, and Argentina.

Let's examine the other options:

- **(A) Eastern coast of Africa:** This region is characterized by the Great Rift Valley system, not the Andes.
- **(C) Northern coast of Australia:** Australia has mountain ranges like the Great Dividing Range, but not the Andes.
- **(D) Eastern coast of North America:** This coast is bordered by the Appalachian Mountains, not the Andes.

The Andes Mountains are located along the western coast of South America.

Final Answer : Western coast of South America

Answer: (B)

Q35.

Solution

Concept: Identifying countries based on their common nicknames and geographical significance.

Solution: The nickname "Land of the Rising Sun" (Nihon or Nippon in Japanese) is famously associated with Japan. This name is believed to derive from the eastward position of Japan relative to China and the perception that the sun rose from that direction. The name reflects the country's geographical location and its cultural symbolism, where the sun is a significant element in its history and flag.

Let's look at the other options:

- **(A) Thailand:** Known as the "Land of Smiles."
- **(B) China:** Often referred to as the "Middle Kingdom."
- **(C) South Korea:** Does not have a widely recognized nickname related to the sun.

Therefore, Japan is known as the "Land of the Rising Sun."

Final Answer : Japan

Answer: (D)

Q36.

Solution

Concept: Major grassland regions of the world and their locations.

Solution: The Pampas are vast, fertile temperate grasslands that are a prominent geographical feature of South America. They are primarily located in the central and southern regions of Argentina, extending into Uruguay and the southernmost tip of Brazil. These grasslands are renowned for their rich soil, making them ideal for extensive agriculture, particularly the cultivation of grains like wheat and maize, and for cattle ranching.

Let's consider the other options:

- **(A) Australia:** Known for its grasslands like the Downs and the Nullarbor Plain.
- **(C) South Africa:** Has grasslands like the Highveld.
- **(D) Russia:** Known for the vast steppe grasslands in its southern regions.

However, the Pampas specifically refer to the grasslands of Argentina and Uruguay.

Final Answer : Argentina

Answer: (B)

Q37.

Solution

Concept: The influence of ocean currents on regional climates.

Solution: Ocean currents play a significant role in moderating regional climates by transporting heat. The Gulf Stream is a powerful, warm ocean current that originates in the Gulf of Mexico and flows northeast across the Atlantic Ocean. As it approaches Western Europe, it brings warm tropical waters northward, significantly warming the climate of the region. This warming effect is so pronounced that countries like the United Kingdom and the western coast of Europe experience much milder winters than other regions at similar latitudes.

Let's look at the other currents:

- **(A) Labrador Current:** A cold current flowing south from the Arctic, which cools the climate of eastern Canada.
- **(B) Canary Current:** A cold current flowing southward along the coast of Northwest Africa.
- **(D) Oyashio Current:** A cold current flowing south from the Arctic along the eastern coast of Japan.

The Gulf Stream is the warm current responsible for the moderate climate of Western Europe.

Final Answer : Gulf Stream

Answer: (C)

Q38.

Solution

Concept: Urban population distribution in India based on census data.

Solution: Urban population refers to the number of people living in cities and towns. When considering the absolute number of people residing in urban areas, Maharashtra has consistently had the largest urban population in India according to census data. This is due to a combination of factors, including a high level of industrialization and commercialization, which attracts significant rural-to-urban migration, particularly to its major cities like Mumbai.

Let's check the approximate urban populations from Census 2011:

- Maharashtra: 50.8 million urban population
- Uttar Pradesh: 44.6 million urban population (though not an option here)
- Tamil Nadu: 34.9 million urban population
- Gujarat: 25.7 million urban population
- Karnataka: 23.6 million urban population

Based on these figures, Maharashtra has the highest urban population in absolute numbers.

Final Answer : Maharashtra

Answer: (A)

Q39.

Solution

Concept: Definition of literacy as per the Census of India.

Solution: The Census of India defines a literate person as someone who can both read and write with understanding. This definition goes beyond mere recognition of letters. It implies an ability to comprehend written text and to express thoughts in writing. This standard ensures a meaningful measure of literacy that reflects a person's functional ability to engage with written information.

Let's review the options:

- **(A) Read only:** Insufficient for the Census definition.
- **(B) Write only:** Insufficient for the Census definition.
- **(C) Read and write with understanding:** This is the correct definition used by the Census of India.
- **(D) Speak multiple languages:** This relates to multilingualism, not literacy as defined by the Census.

The Census of India defines literacy as the ability to read and write with understanding.

Final Answer : Read and write with understanding

Answer: (C)

Q40.

Solution

Concept: Population density variations across Indian states.

Solution: Population density is calculated by dividing the total population by the total land area. India's states exhibit significant variations in population density. Arunachal Pradesh is characterized by a vast geographical area with a relatively small population, much of which is mountainous and forested. This results in a very low population density.

Let's look at the approximate population densities (persons per sq km) from Census 2011:

- **(A) Rajasthan:** Large area, but significant population. Density: 201.
- **(B) Arunachal Pradesh:** Very large area, small population. Density: 17.
- **(C) Sikkim:** Small area, moderate population. Density: 86.
- **(D) Himachal Pradesh:** Hilly terrain, moderate population. Density: 123.

Arunachal Pradesh has the lowest population density among the given Indian states, and indeed among all Indian states.

Final Answer : Arunachal Pradesh

Answer: (B)

Q41.

Solution

Concept: Occupational structure of rural economies in India.

Solution: Rural economies in India, and in many developing countries, are predominantly based on activities directly related to the extraction and production of natural resources. The Primary Sector, which includes agriculture, animal husbandry, forestry, fishing, and mining, employs the vast majority of the rural population. Agriculture, in particular, is the mainstay for a significant portion of India's rural workforce, providing livelihoods for farmers, agricultural laborers, and associated activities.

Let's examine the other sectors:

- **(B) Secondary sector:** This sector (manufacturing, construction) has a presence in rural areas but employs a much smaller proportion of the population compared to agriculture.
- **(C) Quaternary sector:** This sector (knowledge-based services) is primarily found in urban areas and employs a very small fraction of the rural population.
- **(D) Quinary sector:** This is the highest level of decision-making and research, also largely concentrated in urban centers.

Therefore, the primary sector dominates the occupational structure of rural India.

Final Answer : Primary sector

Answer: (A)

Q42.

Solution

Concept: Characteristics of different types of rural settlements.

Solution: Rural settlements are classified based on the spatial arrangement of houses and other structures.

- **Clustered settlements:** Houses are grouped closely together, often around a central point. Found typically in fertile alluvial plains where land is suitable for agriculture and water is available.
- **Dispersed settlements:** Houses are spread far apart from each other, with farms and fields in between. This pattern is common in regions where settlement is constrained by geographical factors or where agriculture is extensive rather than intensive.
- **Semi-clustered settlements:** A hybrid where houses are arranged in lines or chains, or in a cluster with open space between them.
- **Linear settlements:** Houses arranged in a line, often along a road, river, or railway.

Dispersed settlements are commonly found in hilly and forested regions where land is uneven, resources might be scattered, and it's difficult to clear large contiguous areas for building and intensive farming. They are also found in extensive agricultural areas where large farms are spread out.

Let's consider the other options:

- **(A) Fertile plains:** Usually support clustered settlements due to agricultural potential and water availability.
- **(B) Coastal deltas:** Often fertile and water-rich, leading to clustered settlements.
- **(D) Mining belts:** Can lead to clustered settlements around mines, but not necessarily dispersed ones.

Hilly and forested regions, with their difficult terrain and scattered resources, are most conducive to dispersed settlement patterns.

Final Answer : Hilly and forested regions

Answer: (C)

Q43.

Solution

Concept: Definition and population threshold for megacities.

Solution: A megacity is an extremely large urban agglomeration. While definitions can vary slightly across different organizations and contexts, the most widely accepted definition, as used by the United Nations and other demographic bodies, defines a megacity as an urban area with a population of 10 million or more people. These cities are characterized by their immense size, density, and complex socio-economic and environmental challenges.

Let's examine the options based on common definitions:

- **(A) 1 million:** This typically defines a large city or metropolis, not a megacity.
- **(B) 5 million:** Some older or less strict definitions might consider 5 million, but the current standard is higher.
- **(C) 10 million:** This is the most common threshold for defining a megacity.
- **(D) 20 million:** A city exceeding 20 million is considered an exceptionally large megacity or a hypercity.

Therefore, a megacity is generally defined as a city having a population above 10 million.

Final Answer : 10 million

Answer: (C)

Q44.

Solution

Concept: Classification of natural resources based on their regeneration rate.

Solution: Natural resources are classified into renewable and non-renewable categories based on their ability to replenish themselves over time.

- **Renewable Resources:** These resources can be replenished naturally at a rate comparable to their rate of consumption. Examples include solar energy, wind energy, tidal energy, geothermal energy, and biomass.
- **Non-renewable Resources:** These resources exist in finite quantities and are consumed much faster than they can be naturally formed. Once depleted, they are effectively gone for human timescales. Examples include fossil fuels like coal, petroleum, and natural gas, as well as minerals like iron ore and copper.

Let's assess the options:

- **(A) Solar energy:** Renewable, derived from the sun.
- **(B) Wind energy:** Renewable, driven by atmospheric pressure differences.
- **(C) Coal:** A fossil fuel, formed over millions of years from ancient organic matter. It is a non-renewable resource.
- **(D) Tidal energy:** Renewable, derived from the gravitational pull of the moon and sun.

Coal is the non-renewable resource among the given options.

Final Answer : Coal

Answer: (C)

Q45.

Solution

Concept: Agricultural practices adapted to specific geographical conditions, particularly slopes.

Solution: Terrace cultivation, also known as terracing, is an agricultural technique used to grow crops on steep slopes or hillsides. It involves creating a series of flat, step-like terraces on the slope. This method serves several crucial purposes:

- **Reduce soil erosion:** The flat terraces intercept rainwater runoff, slowing it down and preventing it from washing away the topsoil downslope. This helps conserve fertile soil.
- **Increase cultivable land:** By creating flat platforms, it makes steep, otherwise unusable land suitable for farming.
- **Improve water management:** Terraces help in retaining moisture for the crops.

While it can be associated with specific types of agriculture like plantation crops (e.g., tea, coffee) or even grains, its primary purpose is to manage the challenges of farming on slopes.

Let's look at the options:

- **(A) Increase industrialization:** Irrelevant to terrace cultivation.
- **(B) Reduce soil erosion on slopes:** This is a primary and most important objective of terrace cultivation.
- **(C) Promote plantation agriculture:** While often used for plantations, this is a specific application, not the main reason for the practice itself.
- **(D) Encourage mechanized farming:** Terraces can be adapted for some mechanization, but their primary purpose is not to facilitate large-scale machinery use on steep slopes.

Therefore, terrace cultivation is mainly practiced to reduce soil erosion on slopes.

Final Answer : Reduce soil erosion on slopes

Answer: (B)

Q46.

Solution

Concept: Agricultural practices in different regions of India, specifically shifting cultivation.

Solution: Shifting cultivation, also known as slash-and-burn agriculture, is a subsistence farming method where small plots of land are cleared (often by cutting and burning vegetation), cultivated for a few years until the soil fertility depletes, and then abandoned to allow the forest to regenerate. This practice is typically found in areas with dense forests and low population density, where land is abundant. In India, shifting cultivation is most commonly associated with the North-Eastern hills region. This includes states like Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, Manipur, and Tripura, where indigenous communities have traditionally practiced this form of agriculture.

Let's evaluate the other regions:

- **(A) Punjab plains:** Known for intensive, mechanized, and irrigated agriculture, particularly wheat and rice. Shifting cultivation is not practiced here.
- **(B) Western Rajasthan:** A desert region, characterized by arid farming and pastoralism.
- **(D) Gujarat coast:** Primarily coastal and agricultural areas, not suitable for or practicing shifting cultivation.

The North-Eastern hills region of India is most strongly associated with shifting cultivation.

Final Answer : North-Eastern hills

Answer: (C)

Q47.

Solution

Concept: International collaborations in establishing major industrial projects in India.

Solution: The Bhilai Steel Plant, located in Chhattisgarh, is one of India's largest and oldest integrated steel plants. It was established with significant technical and financial assistance from the Soviet Union (now Russia) during the mid-1950s as part of India's post-independence industrial development strategy. The collaboration provided the expertise, machinery, and training necessary to build and operate a large-scale steel facility.

Let's look at the other options:

- **(A) USA:** While the US has collaborated on various projects, Bhilai's establishment was primarily with Soviet aid.
- **(B) Germany:** Germany has collaborated on other major industrial projects in India, but not Bhilai Steel Plant.
- **(D) Japan:** Japan has also been a partner in several Indian industrial ventures, but not this specific steel plant.

The Bhilai Steel Plant was established with the collaboration of Russia (formerly the Soviet Union).

Final Answer : Russia

Answer: (C)

Q48.

Solution

Concept: Leading states in India for specific mineral production, particularly lignite.

Solution: Lignite, also known as brown coal, is a lower form of coal with a lower energy content. It is an important fuel for power generation and industrial use. Among the Indian states, Tamil Nadu is the largest producer of lignite. The Neyveli Lignite Corporation (NLC India Limited) in Tamil Nadu is a major mining and power generation complex that extracts and utilizes vast quantities of lignite.

Let's review the other states:

- **(A) Gujarat:** While Gujarat has mineral resources, it is not the leading producer of lignite.
- **(B) Rajasthan:** Rajasthan is known for minerals like zinc, lead, silver, and rock phosphate.
- **(D) Odisha:** Odisha is a major producer of iron ore, coal, and bauxite.

Tamil Nadu is the largest producer of lignite in India.

Final Answer : Tamil Nadu

Answer: (C)

Q49.

Solution

Concept: The objectives and scope of watershed management.

Solution: Watershed management is a comprehensive approach to managing the land and water resources within a specific river basin or watershed. It involves planning, developing, and implementing strategies to conserve and sustainably use these resources for the benefit of both the environment and the human population living within the watershed. The primary aims are to protect and enhance the natural resources.

Let's analyze the options:

- **(A) Expanding urban areas:** While urban planning might consider watershed aspects, watershed management itself does not aim to expand urban areas.
- **(B) Conserving soil and water resources:** This is the core objective of watershed management. It focuses on preventing soil erosion, managing water flow, improving water quality, recharging groundwater, and ensuring sustainable use of both soil and water.
- **(C) Increasing mining activities:** Mining can have significant impacts on watersheds, and watershed management often aims to mitigate such impacts, not increase them.
- **(D) Reducing literacy rate:** This is a social objective unrelated to watershed management.

Therefore, watershed management primarily aims at conserving soil and water resources.

Final Answer : Conserving soil and water resources

Answer: (B)

Q50.

Solution

Concept: Geographical routes covered by major railway lines in India.

Solution: The Konkan Railway is a strategically important railway line along India's western coast. It connects Mumbai (in Maharashtra) to Mangaluru (in Karnataka). This line was a major engineering undertaking, traversing difficult terrain involving numerous bridges over rivers and creeks and many tunnels through the Western Ghats. It provided a crucial rail link to the Konkan region, which was previously underserved by rail transport.

Let's look at the other options:

- **(A) Delhi and Mumbai:** Connected by other major railway routes, not primarily the Konkan Railway.
- **(C) Chennai and Kolkata:** Connected by the East Coast Railway line.
- **(D) Jaipur and Ahmedabad:** These cities are connected by rail routes in western India.

The Konkan Railway specifically connects Mumbai and Mangaluru.

Final Answer : Mumbai and Mangaluru

Answer: (B)

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	A	3	B	4	C	5	B
6	C	7	C	8	C	9	B	10	C
11	A	12	A	13	A	14	B	15	A
16	B	17	C	18	C	19	C	20	B
21	B	22	C	23	B	24	B	25	B
26	B	27	B	28	C	29	C	30	C
31	B	32	B	33	C	34	B	35	D
36	B	37	C	38	A	39	C	40	B
41	A	42	C	43	C	44	C	45	B
46	C	47	C	48	C	49	B	50	B