UP Board Class 12 Geography - 322(AK) 2023 Question Paper with Solutions

| Time Allowed : 3 Hours | Maximum Marks : 100 |

General Instructions

Read the following instructions very carefully and strictly follow them:

1. All questions are compulsory.

2. Question Nos. 1 to 8 are Multiple Choice Type Questions. Question Nos. 9 to 16 are Very SHort Answer Type Questions, to be answered in about 20 words each. Question Nos. 17 to 22 are Short Answer Type Questions, to be answered in about 50 words each and Question Nos. 23 and 24 are Long Answer Type Questions, to be answered in about 150 words each. Question Nos. 25 and 26 are map related questions.

3. Marks allotted to the questions are indicated against them.

4. Illustrate your answers with suitable sketch maps and diagrams.

---

1. Which one of the following concepts of human geography believes in the supremacy of nature ?

(A) Possibilism
(B) Positivism
(C) Environmental determination
(D) Neo-determinism

Correct Answer: (C) Environmental determination

Solution:

Step 1: Understanding the Concept:
The question asks to identify the school of thought in human geography that posits nature as the dominant force in shaping human societies and activities. This is a fundamental concept in the study of human-environment interaction.

Step 2: Detailed Explanation:
Let's analyze the given options:

- **Possibilism:** This concept argues that the environment sets certain constraints or limitations, but the culture and decisions of human beings are the primary determinants of

1

societal development. It emphasizes human agency.

- **Positivism:** This is a philosophical approach that emphasizes empirical, observable, and scientifically verifiable data. In geography, it focuses on creating general laws and theories, rather than the specific relationship of nature's supremacy.

- **Environmental determination (or Environmental Determinism):** This doctrine holds that the physical environment, particularly factors like climate and terrain, is the primary force shaping human culture, behavior, and societal development. It directly implies the supremacy of nature over human actions.

- **Neo-determinism (or Stop-and-Go Determinism):** Proposed by Griffith Taylor, this is a middle path. It suggests that humans can choose from possibilities offered by the environment, but their choices have consequences. Nature is not seen as supreme, but its limits must be respected.

Based on the definitions, Environmental determination is the concept that explicitly believes in the supremacy of nature.

Step 3: Final Answer:
Therefore, the correct concept that believes in the supremacy of nature is Environmental determination.

> **Quick Tip**
>
> To easily differentiate these concepts, remember their core ideas:
>
> - **Determinism:** Nature controls humans.
> - **Possibilism:** Humans have choices within nature's limits.
> - **Neo-determinism:** A compromise - neither absolute control nor absolute freedom.

---

2. Which one of the following countries has the maximum population?

(A) Bangladesh
(B) Pakistan
(C) United States of America (U.S.A.)
(D) Afghanistan

Correct Answer: (C) United States of America (U.S.A.)

Solution:

Step 1: Understanding the Concept:
The question requires knowledge of the approximate populations of the countries listed to identify the one with the largest population.

Step 2: Detailed Explanation:
Let's compare the approximate populations of the given countries (as of the early 2020s):

- **Bangladesh:** The population is approximately 170 million.

- **Pakistan:** The population is approximately 235 million.

- **United States of America (U.S.A.):** The population is approximately 335 million.

- **Afghanistan:** The population is approximately 40 million.

Comparing these figures: 335 million (U.S.A.) > 235 million (Pakistan) > 170 million (Bangladesh) > 40 million (Afghanistan).
Thus, the United States of America has the maximum population among the given options.

Step 3: Final Answer:
The United States of America (U.S.A.) has the highest population among the choices provided.

> **Quick Tip**
>
> For competitive exams, it's highly beneficial to remember the top 10 most populous countries in order. The top three are consistently India, China, and the U.S.A. Knowing this single fact would immediately lead to the correct answer here.

---

3. Which one of the following is not a plantation crop?

(A) Tea
(B) Rubber
(C) Maize
(D) Coffee

Correct Answer: (C) Maize

Solution:

Step 1: Understanding the Concept:
Plantation agriculture is a form of commercial farming where a single crop is cultivated on a

large scale. These crops are grown for profit and are often exported. The question asks to identify the crop from the list that does not fit this description.

Step 2: Detailed Explanation:
Let's examine each option:

- **Tea:** Grown on large estates called tea gardens, it is a classic example of a plantation crop, requiring significant capital and labor.

- **Rubber:** Cultivated on large plantations, especially in Southeast Asia, for its latex. It is a major industrial raw material and a typical plantation crop.

- **Maize (Corn):** Maize is a cereal grain. While it can be grown on a large commercial scale (commercial grain farming), it is primarily classified as a food crop or a staple grain, not a traditional plantation crop like tea or coffee. It is grown under various agricultural systems worldwide.

- **Coffee:** Grown on large estates known as coffee plantations, especially in Latin America and Africa. It is a high-value commercial crop and a prime example of a plantation crop.

Tea, Rubber, and Coffee fit the definition of plantation crops. Maize is the exception.

Step 3: Final Answer:
Therefore, Maize is not considered a plantation crop in the traditional sense.

> **Quick Tip**
>
> Remember that plantation crops are typically perennial (live for many years) and are grown in tropical or subtropical climates for export. Cereal grains like maize, wheat, and rice are usually classified under different farming types.

---

4. Which of the following types of agriculture is known as the farming of citrus fruits?

(A) Co-operative farming
(B) Plantation agriculture
(C) Mediterranean agriculture
(D) Market gardening

Correct Answer: (C) Mediterranean agriculture

Solution:

Step 1: Understanding the Concept:
The question asks to identify the specific type of agriculture that is characteristically associated with the cultivation of citrus fruits like oranges, lemons, and grapes.

Step 2: Detailed Explanation:
Let's analyze the options:

- **Co-operative farming:** This is an organizational model where farmers pool their resources. It is not defined by the type of crop grown.

- **Plantation agriculture:** This involves large-scale farming of a single cash crop like tea, rubber, or coffee, but it is not specifically known for citrus fruits.

- **Mediterranean agriculture:** This is a highly specialized form of commercial agriculture found in regions with a Mediterranean climate (hot, dry summers and mild, rainy winters). This type of agriculture is famous for viticulture (grape cultivation) and the farming of citrus fruits and olives.

- **Market gardening (Horticulture):** This involves the intensive cultivation of high-value crops like vegetables, fruits, and flowers for nearby urban markets. While it could include citrus fruits, the term 'Mediterranean agriculture' is specifically and famously associated with them.

The most accurate and specific answer is Mediterranean agriculture, as it is defined by its specialization in citrus fruits and grapes.

Step 3: Final Answer:
The type of agriculture known for the farming of citrus fruits is Mediterranean agriculture.

> **Quick Tip**
>
> Always associate climatic regions with their specific agricultural types. The Mediterranean climate is unique and directly linked to Mediterranean agriculture, which specializes in viticulture (grapes), olives, and citrus fruits.

---

5. Which one of the following is a tertiary activity?

(A) Weaving
(B) Farming
(C) Trading

(D) Hunting

Correct Answer: (C) Trading

Solution:

Step 1: Understanding the Concept:
Economic activities are classified into different sectors. The question asks to identify the activity that belongs to the tertiary sector.

- **Primary Sector:** Involves the extraction of raw materials from the earth. (e.g., farming, mining, fishing, hunting).

- **Secondary Sector:** Involves the processing of these raw materials into finished goods. (e.g., manufacturing, construction, weaving).

- **Tertiary Sector:** Involves providing services to consumers and businesses. (e.g., trade, transport, banking, healthcare).

Step 2: Detailed Explanation:
Let's classify the given options:

- **Weaving:** This is a manufacturing process that converts raw fiber (like cotton or wool) into cloth. It falls under the **secondary sector**.

- **Farming:** This involves cultivating land to grow crops. It is a direct extraction of resources from nature and belongs to the **primary sector**.

- **Trading:** This involves the buying and selling of goods. It does not produce a tangible product but provides a service. Therefore, it is a **tertiary activity**.

- **Hunting:** This is the activity of pursuing and killing wild animals. It is a form of gathering resources directly from nature and belongs to the **primary sector**.

Based on this classification, trading is the only tertiary activity.

Step 3: Final Answer:
The tertiary activity among the given options is Trading.

---

6. Which one of the following states has the highest density of population?

(A) Uttar Pradesh
(B) West Bengal
(C) Kerala
(D) Punjab

Correct Answer: (B) West Bengal

Solution:

Step 1: Understanding the Concept:
The question asks for the state with the highest population density, not the highest total population. Population density is defined as the number of people per unit of area (usually per square kilometer).

Step 2: Detailed Explanation:
Let's look at the population density data for the given states as per the 2011 Census of India:

- **Uttar Pradesh:** Has the largest population in India, but its density is 829 persons per sq. km.

- **West Bengal:** Has a population density of 1,028 persons per sq. km.

- **Kerala:** Has a population density of 860 persons per sq. km.

- **Punjab:** Has a population density of 551 persons per sq. km.

Comparing the values, West Bengal (1,028) has the highest population density among the given options. It is important to note that the state with the highest population density in India is Bihar (1,106), but it is not listed as an option.

Step 3: Final Answer:
Among the given choices, West Bengal has the highest density of population.

> **Quick Tip**
>
> Be very careful to distinguish between 'highest population' and 'highest population density'. Uttar Pradesh has the highest population, but Bihar has the highest population density. In this question's options, West Bengal is the densest.

---

7. Through which one of the following states of India, Indira Gandhi canal passes ?

(A) Rajasthan
(B) Uttar Pradesh
(C) Gujarat
(D) Madhya Pradesh

Correct Answer: (A) Rajasthan

Solution:

Step 1: Understanding the Concept:
The question is about the route of the Indira Gandhi Canal, one of the most extensive canal systems in India. It was built to provide water for irrigation to the arid and semi-arid regions of the Thar Desert.

Step 2: Detailed Explanation:
The Indira Gandhi Canal originates at the Harike Barrage, which is located at the confluence of the Satluj and Beas rivers in the state of Punjab. From its origin, the canal's route is as follows:

- It runs for some distance through Punjab and Haryana.

- Its main and longest stretch passes through the state of **Rajasthan**, providing irrigation to several districts like Ganganagar, Bikaner, and Jaisalmer.

- The canal does not pass through Uttar Pradesh, Gujarat, or Madhya Pradesh. Its primary beneficiary state is Rajasthan.

Therefore, among the given options, Rajasthan is the correct answer.

Step 3: Final Answer:
The Indira Gandhi Canal passes through the state of Rajasthan.

> **Quick Tip**
>
> The Indira Gandhi Canal is famously known as the "lifeline of Rajasthan" because it transformed vast tracts of the Thar Desert into agriculturally productive land. This strong association makes it easy to remember that the canal's primary path is through Rajasthan.

---

8. "Bombay High" is famous for the mining of

(A) Copper
(B) Iron-ore
(C) Mineral oil
(D) Bauxite

Correct Answer: (C) Mineral oil

Solution:

Step 1: Understanding the Concept:
The question asks to identify the primary resource extracted from "Bombay High" (now known as Mumbai High). This requires knowledge of major mineral and energy resource locations in India.

Step 2: Detailed Explanation:
Let's analyze the options in the context of Bombay High:

- **Bombay High (Mumbai High)** is a large offshore oilfield located in the Arabian Sea, about 176 kilometers off the coast of Mumbai.

- It is India's largest and most significant oil and gas production field, operated by the Oil and Natural Gas Corporation (ONGC).

- It is famous for the extraction of crude petroleum, which is a type of **mineral oil**, and natural gas.

- The other options are terrestrial minerals found elsewhere in India: Copper is mined mainly in Rajasthan and Madhya Pradesh, Iron-ore in Odisha and Jharkhand, and Bauxite in Odisha and Gujarat.

Thus, Bombay High is specifically associated with the mining (drilling) of mineral oil.

Step 3: Final Answer:
"Bombay High" is famous for the mining of Mineral oil.

> **Quick Tip**
>
> The word "High" in geological terms can refer to a structural high or dome, which is a common feature for trapping oil and gas. Associating the name "Bombay High" with an offshore oil platform is a key piece of information for Indian geography.

---

9. Define human geography.

Answer:
Human geography is a major branch of geography that studies the world, its people, communities, and cultures with a focus on their relationships with and across space and place. It explores the interrelationships between the physical (natural) environment and the socio-cultural environment created by human beings.

According to Friedrich Ratzel, "Human geography is the synthetic study of relationships between human societies and the earth's surface."

Essentially, it investigates how human activities affect and are influenced by the Earth's surface.

> **Quick Tip**
>
> To define human geography simply, focus on its core theme: the study of the dynamic relationship between human beings (the cultural environment) and their natural environment. It's about where people are, what they are like, and how they interact with their surroundings.

---

10. What is meant by Human Resource ?

Answer:
Human Resource refers to the people who make up the workforce of an organization, business sector, industry, or economy. More broadly, it is the population of a country considered as an asset, valued for its skills, knowledge, and abilities that contribute to economic development and productivity. It encompasses both the quantitative (number of people) and qualitative (education, health, skills) aspects of the population. When people are healthy, educated, and motivated, they become a valuable 'human resource'.

11. Differentiate between primary and secondary activities.

Answer:
The key differences between primary and secondary activities are as follows:

Basis	Primary Activities	Secondary Activities
Definition	Economic activities that are directly dependent on the environment for the extraction and utilization of natural resources.	Economic activities that add value to natural resources by transforming raw materials into finished or valuable products.
Nature of Work	Involves gathering or extracting raw materials from the earth.	Involves processing, manufacturing, and construction.
Examples	Agriculture, mining, fishing, forestry, hunting, and gathering.	Iron and steel manufacturing, car production, textile weaving, baking, and construction.
Economic Stage	Dominant in less developed or pre-industrial economies.	Dominant in industrializing and developed economies.

12. Define clustered settlement.

Answer:
A clustered settlement is a type of rural settlement where houses, buildings, and farms are closely packed together in a compact form. These settlements often develop around a central point, such as a water source (river, well), a religious site (temple, church), a market, or a defensive structure like a fort. The surrounding agricultural lands are distinct and separate from the built-up area. This pattern is common in fertile alluvial plains and river valleys where productive land is abundant.

---

13. Mention any two means of irrigation in India.

Answer:
Two major means of irrigation in India are:

1. **Well and Tubewell Irrigation:** This is the most widespread means of irrigation in India, accounting for the largest share of the irrigated area. It involves drawing groundwater from wells and tubewells using electric or diesel pumps. It is particularly dominant in the alluvial plains of North India.

2. **Canal Irrigation:** This is the second most important source of irrigation. It involves a network of main canals, branch canals, and distributaries that divert water from rivers or reservoirs to the fields. It is prominent in states like Punjab, Haryana, Uttar Pradesh, and Andhra Pradesh.

> **Quick Tip**
>
> For irrigation in India, think "ground vs. surface". The two primary methods are using groundwater (wells/tubewells) and using surface water from rivers (canals). These two cover the vast majority of irrigation in the country.

---

14. Describe "Hill Area Development Programme."

Answer:
The Hill Area Development Programme (HADP) was initiated during the Fifth Five-Year Plan in India. Its primary objective is the integrated and sustainable development of designated hilly regions of the country.

Key Features:

- It focuses on the specific needs and ecological fragility of hill areas.

- The programme emphasizes the development of sectors in which these regions have a comparative advantage, such as horticulture, plantation agriculture, animal husbandry, poultry, forestry, and small-scale and village industries.

- A crucial aspect of the programme is maintaining ecological balance and promoting afforestation and soil conservation.

- It aims to improve the quality of life of the hill communities by providing basic infrastructure and employment opportunities, thereby reducing regional disparities.

The programme covers specific hill districts in states like Uttarakhand, Assam, West Bengal, and Tamil Nadu.

> **Quick Tip**
>
> Remember the core idea of the HADP: developing hill areas based on their unique strengths (like growing fruits or tea) while carefully protecting their fragile environment. It's a blend of economic growth and ecological preservation.

---

15. Define sex-ratio.

Answer:
The sex ratio is a demographic indicator that measures the proportion of males to females in a population. In the context of India, it is defined as the **number of females per 1000 males** in the population.
The formula used to calculate it is:

$$\text{Sex Ratio} = \left(\frac{\text{Total number of females}}{\text{Total number of males}}\right) \times 1000$$

A sex ratio of more than 1000 indicates an excess of females over males, while a ratio below 1000 indicates a deficit of females. It is a crucial indicator of gender balance and social well-being in a society.

> **Quick Tip**
>
> Always remember the Indian context: "Females per 1000 Males". A simple way to recall this is to think about the social concern it addresses – the deficit of females in the population. The formula is designed to highlight this number.

---

16. Mention any two major coal-producing areas in India.

Answer:
Two major coal-producing areas in India are:

1. **Jharia Coalfield, Jharkhand:** Located in the Damodar River valley, Jharia is India's largest and one of its most important coalfields. It is the primary source of prime coking coal used in the iron and steel industry.

2. **Raniganj Coalfield, West Bengal:** This is the oldest coalfield in India, also situated in the Damodar valley. It contains high-quality non-coking coal and is a significant producer for thermal power plants and various other industries.

> **Quick Tip**
>
> When asked about coal in India, think of the Damodar Valley, often called the "Ruhr of India". This region in Jharkhand and West Bengal is home to the most famous and productive coalfields like Jharia and Raniganj.

---

17. Write the names of four main components of human development.

Answer:
The four main components, often referred to as the pillars of human development, are:

1. **Equity:** Refers to making equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income, and caste.

2. **Sustainability:** Means continuity in the availability of opportunities. This implies that each generation must have the same opportunities, and all environmental, financial, and human resources must be used keeping in mind the future.

3. **Productivity:** Refers to human labour productivity or productivity in terms of human work. It is built by enhancing people's capabilities, which leads to better health, knowledge, and skills.

4. **Empowerment:** Refers to having the power to make choices. This power comes from increasing freedom and capability. Good governance and people-centric policies are required to empower people.

> **Quick Tip**
>
> Use the acronym **ESPE** to remember the four pillars: **E**quity, **S**ustainability, **P**roductivity, and **E**mpowerment. These four concepts form the foundation of the human development approach.

---

18. Differentiate between Nomadic Herding and Commercial Livestock Rearing.

Answer:

The main differences between Nomadic Herding and Commercial Livestock Rearing are:

Basis	Nomadic Herding	Commercial Livestock Rearing
Purpose	It is a subsistence activity, where herders raise animals to meet the needs of their families for food, clothing, and shelter.	It is a commercial activity aimed at generating profit by selling animal products like meat, wool, milk, and hides on the market.
Method	Herders are nomadic, moving with their animals from place to place in search of natural pasture and water along well-defined routes.	It is practiced on permanent, large ranches. It is organized, scientific, and capital-intensive.
Animal Type	Multiple types of animals are kept together, depending on the region (e.g., sheep, goats, camels, cattle).	Focus is on a single type of animal, bred scientifically for maximum yield (e.g., cattle for beef, sheep for wool).
Scale and Area	It is extensive and practiced in arid and semi-arid regions like the Sahara, Central Asia, and parts of Eurasia.	It is a specialized, large-scale activity common in temperate grasslands like the Pampas, Steppes, and Downs.

> **Quick Tip**
>
> To simplify, remember:
>
> - **Nomadic Herding:** Traditional, moving for survival, multiple animals.
>
> - **Commercial Rearing:** Modern, stationary (on ranches), for profit, one specialized animal type.

---

19. Describe the factors for the development of Iron and Steel industry in the world and write the names of important countries of this industry.

Answer:

The development of the Iron and Steel industry, being a heavy and capital-intensive industry, depends on several key factors.

Factors for Development:

1. **Availability of Raw Materials:** The industry is traditionally located near the sources of its bulky raw materials: iron ore, coking coal, limestone, and manganese. Transporting these is expensive, so proximity is crucial.

2. **Transport and Market Access:** An efficient transportation network (railways, waterways) is vital for moving raw materials to the plant and finished products to the market.

Proximity to industrial markets where steel is consumed is also a major advantage.

3. **Capital Investment:** Setting up an integrated steel plant requires enormous capital investment in machinery and infrastructure.

4. **Technology and Skilled Labour:** The availability of advanced technology for smelting and processing, along with a supply of skilled engineers and labour, is essential for efficiency and quality.

5. **Power Supply:** The industry requires a large and uninterrupted supply of cheap power, historically provided by coking coal.

Important Countries:

The major iron and steel producing countries in the world include:

- China (the world's largest producer by a large margin)
- India
- Japan
- United States of America (U.S.A.)
- Russia
- South Korea

Quick Tip

For factors affecting any heavy industry like Iron and Steel, always think of the "Big Four": **Raw Materials**, **Power**, **Transport**, and **Market**. These are the fundamental geographical and economic factors that determine its location and success.

---

20. Define the concept of sustainable development.

Answer:

Sustainable development is a development paradigm that aims to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. This concept was famously defined in the 1987 Brundtland Commission Report, "Our Common Future".

It is built upon three interconnected pillars:

1. **Environmental Sustainability:** Conserving natural resources, protecting ecosystems, and ensuring that development does not cause irreversible harm to the planet.

2. **Economic Sustainability:** Promoting economic growth that is efficient, equitable, and improves the standard of living for all without depleting natural capital.

3. **Social Sustainability:** Ensuring social equity, justice, and inclusiveness, and providing for basic human needs like health, education, and security for all members of society.

In essence, it is about finding a balance between economic progress, social equity, and environmental protection for the long-term well-being of humanity.

> **Quick Tip**
>
> The most crucial phrase to remember for sustainable development is: **"meeting the needs of the present without compromising the ability of future generations to meet their own needs."** This single sentence perfectly encapsulates the core idea of balancing today's needs with tomorrow's resources.

---

21. What is urbanisation ? Discuss any two problems of urbanisation in India.

Answer:
Urbanisation
Urbanisation is the process of societal transformation characterized by the increasing proportion of a country's population living in urban areas (cities and towns). It involves the migration of people from rural to urban areas, the physical growth of urban centres, and the spread of urban culture and lifestyles.
Two Major Problems of Urbanisation in India:

1. **Overcrowding and Housing Crisis:** The rapid influx of migrants into cities far outpaces the development of adequate housing. This leads to severe overcrowding and the proliferation of slums and informal settlements, which lack basic amenities like clean water, sanitation, and electricity, resulting in poor living conditions and health hazards.

2. **Stress on Public Utilities and Infrastructure:** Existing urban infrastructure, including water supply, sewerage systems, electricity grids, and public transport, is often unable to cope with the demands of the rapidly growing population. This results in frequent water shortages, poor waste management, traffic congestion, and an overburdened public transport system, degrading the overall quality of urban life.

22. Describe the stages of demographic transition.

Answer:

The Demographic Transition Theory describes the shift in population dynamics from high birth and death rates to low birth and death rates as a country develops from a pre-industrial to an industrialized economic system. It typically involves four stages, with a fifth one sometimes included.

The Stages are:

- **Stage 1: High Stationary** This stage is characterized by high birth rates and high death rates. Death rates are erratic due to famines, epidemics, and wars. As a result, the population growth rate is very slow and stable. This stage represents pre-industrial societies. No country is currently in this stage.

- **Stage 2: Early Expanding** In this stage, the death rate begins to fall sharply due to improvements in sanitation, public health, and food supply. However, the birth rate remains high due to social norms and lack of access to contraception. The wide gap between high birth rates and low death rates leads to a period of rapid population growth or a "population explosion". Many developing countries are in this stage.

- **Stage 3: Late Expanding** The birth rate starts to decline rapidly as the country becomes more urbanized, educational levels rise (especially for women), and access to family planning increases. The death rate continues to fall but at a slower pace. The population continues to grow, but the rate of growth begins to slow down.

- **Stage 4: Low Stationary** Both birth and death rates are low and relatively stable. The population growth becomes very slow, zero, or even negative. This stage is characteristic of developed, industrialized countries with high levels of economic development and social stability.

- **Stage 5: Declining (Hypothetical)** Some demographers propose a fifth stage where fertility rates fall significantly below the replacement level, and the death rate exceeds the birth rate, leading to a net decline in the total population. Some countries like Japan and Germany are showing characteristics of this stage.

> **Quick Tip**
>
> Visualize the demographic transition as a simple story of two lines (birth rate and death rate) on a graph:
>
> - **Stage 1:** Both lines are high and close together.
> - **Stage 2:** The death rate line drops, creating a wide gap (population boom).
> - **Stage 3:** The birth rate line starts to drop, closing the gap.
> - **Stage 4:** Both lines are low and close together again.

---

23. Discuss the factors influencing the distribution and density of population in the world.

Answer:
The distribution and density of the world's population are highly uneven. Some areas are densely populated while others are sparsely populated. This variation is influenced by a complex interplay of several factors, which can be broadly categorized into geographical, economic, and social-cultural factors.

1. Geographical Factors These factors relate to the physical environment and its resource potential.

- **Availability of Water:** Water is the most essential factor for life. People prefer to live in areas where fresh water is easily available for drinking, agriculture, and industry. River valleys like the Nile, Ganges, and Yangtze are among the most densely populated regions in the world. Conversely, deserts with scarce water are sparsely populated.

- **Landforms:** People prefer living on flat plains and gentle slopes. These areas are favorable for crop production, road construction, and industrial development. The Indo-Gangetic Plains, the plains of North America, and Europe are densely populated. Mountainous and hilly areas with rugged terrain, like the Himalayas or the Andes, are sparsely populated due to difficulties in transport, agriculture, and construction.

- **Climate:** Areas with a comfortable and temperate climate, without extreme variations in temperature, attract more people. Mediterranean regions are popular due to their pleasant climate. Extreme climates, such as the hot and humid Amazon basin, the frigid polar regions, or hot deserts like the Sahara, have very low population densities.

- **Soils:** Fertile soils are crucial for agriculture. Areas with fertile loamy or alluvial soils can support intensive agriculture and thus a large population. The riverine plains of China, India, and the United States are examples. Areas with thin, rocky, or infertile soils cannot support large populations.

2. **Economic Factors** These factors relate to the economic opportunities available in an area.

   - **Minerals:** The discovery of mineral deposits can lead to a population surge in an area, even if the climate is harsh. The mining and industrial activities create job opportunities. The Katanga-Zambia copper belt in Africa and the gold rush areas in Australia are examples.

   - **Urbanisation:** Cities and towns are centers of economic activity, offering better employment opportunities, educational and health facilities, and higher standards of living. This pulls a large number of migrants from rural areas, leading to high population density in urban centers like Tokyo, Mumbai, and New York.

   - **Industrialisation:** Industrial belts provide numerous jobs and attract a large number of workers. These include not just factory workers but also transport operators, shopkeepers, service providers, etc. The Kobe-Osaka region in Japan is an example of a densely populated industrial region.

3. **Social and Cultural Factors** These factors relate to human society and its organization.

   - **Religious or Cultural Significance:** Places with religious or cultural importance often attract more people. Cities like Jerusalem, Varanasi, and Rome are examples where people have settled for centuries due to their cultural or religious significance.

   - **Political Stability and Government Policies:** People tend to move away from places with political turmoil, civil unrest, and war. Stable and peaceful countries attract more people. Governments can also influence population distribution through policies, such as offering incentives to settle in sparsely populated areas or creating planned cities.

Quick Tip

To structure your answer, always remember the three main categories of factors: **Geographical** (nature-related), **Economic** (job and money-related), and **Social/Political** (people and government-related). This framework will help you cover all key points comprehensively.

---

23. (OR) Divide Indian towns into major types on the basis of their functions.

Answer:
Indian towns and cities can be classified into several major types based on their dominant or specialized functions. While most towns perform multiple functions, one function usually stands out and defines the city's character. The major functional types are:

1. **Administrative Towns and Cities:** These are centers of governance and administration. They serve as the capitals of the country, states, or as district headquarters.
   Examples: New Delhi (national capital), Chandigarh (capital of Punjab and Haryana), Gandhinagar (capital of Gujarat), Bhopal, Chennai.

2. **Industrial Towns:** These towns owe their origin and growth to industrial development. The economy is dominated by manufacturing and processing industries.
   Examples: Jamshedpur (iron and steel), Mumbai (textiles, finance), Bhilai (steel), Modinagar (various industries), Surat (textiles, diamonds).

3. **Transport Cities:** These may be major ports that are hubs of import and export, or they can be large inland hubs of rail and road transport.
   Examples: Kandla, Kozhikode, Visakhapatnam (port cities); Mughalsarai (now Pt. Deen Dayal Upadhyaya Nagar), Itarsi (inland transport hubs).

4. **Commercial Towns:** These are centers of trade and commerce. They often have major markets, wholesale trade, and financial institutions.
   Examples: Kolkata, Saharanpur, Satna (historical trading centers).

5. **Mining Towns:** These towns have developed in areas rich in mineral resources and their economy is centered around mining and quarrying activities.
   Examples: Jharia (coal), Raniganj (coal), Digboi (oil), Khetri (copper).

6. **Garrison (Cantonment) Towns:** These towns originated as military bases during the British period and continue to be centers for the armed forces.
   Examples: Ambala, Jalandhar, Mhow, Babina, Udhampur.

7. **Educational Towns:** Some towns become prominent centers of education, with a high concentration of universities, colleges, and schools.
   Examples: Roorkee, Varanasi, Pilani, Allahabad (Prayagraj), Kota.

8. **Religious and Cultural Towns:** These places are famous for their religious or cultural significance, attracting pilgrims and devotees from all over.
   Examples: Varanasi, Amritsar, Tirupati, Puri, Ajmer, Hardwar.

9. **Tourist Towns:** These towns are known for their scenic beauty, historical monuments, or recreational facilities, making tourism their primary economic activity.
   Examples: Shimla, Nainital, Ooty (Udhagamandalam), Jaisalmer, Goa.

---

24. Describe the petroleum resources of India.

Answer:
Petroleum, or mineral oil, is a crucial energy resource for India. However, the country's domestic production is insufficient to meet its demand, making India heavily dependent on imports. The petroleum resources in India are located in both onshore and offshore regions. The distribution of these resources is as follows:

1. Offshore Oilfields Offshore fields are the largest source of petroleum in India, contributing to a majority of the country's total production.

- **Mumbai High:** Located in the Arabian Sea, about 176 km northwest of Mumbai, this is India's largest and most significant oilfield. It was discovered in 1974 and production started in 1976. It contributes a very large share of India's total crude oil production.

- **Bassein (Vasai) Field:** Located south of Mumbai High, this field is rich in both oil and natural gas.

- **Eastern Offshore (Krishna-Godavari Basin):** The basins of the Krishna and Godavari rivers on the east coast have emerged as significant areas for both oil and natural gas reserves. The Ravva offshore field is a notable producer in this region.

2. Onshore Oilfields Onshore production comes from several states, with Assam, Gujarat, and Rajasthan being the most important.

- **Assam (Brahmaputra Valley):** This is the oldest oil-producing region in India. The major fields are:
  - **Digboi:** The oldest oilfield in India, where oil was first discovered in 1867.
  - **Naharkatiya and Moran-Hugrijan:** These are other significant oilfields in the state. Oil from these fields is sent to refineries at Nunmati (Guwahati) and Barauni.
- **Gujarat Plains:** This is the second-largest onshore producing region in India. The important fields include:
  - **Ankleshwar:** One of the most important fields in Gujarat.
  - **Kalol, Mehsana, Navagam, and Kosamba** are other major oil-producing areas.

- **Rajasthan:** Rajasthan has emerged as a major onshore producer in recent years. The Mangala oil field in the Barmer district is the largest onshore oil discovery in India in over two decades. Other important fields in the region include Bhagyam and Aishwarya.

The exploration and production of petroleum in India are primarily managed by two public sector companies: the Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL), along with several private and joint-venture companies. Despite these resources, India's domestic production meets only a fraction of its consumption needs.

> **Quick Tip**
>
> To remember India's petroleum resources, create a mental map with three key zones:
>
> 1. **West Coast (Offshore):** Dominated by the giant Mumbai High.
>
> 2. **Northeast (Onshore):** The historic fields of Assam (Digboi).
>
> 3. **West (Onshore):** The fields of Gujarat and the new discoveries in Rajasthan.

---

24. (OR) Describe the nature and scope of human geography.

Answer:
Human geography is a fundamental branch of geography that focuses on the study of human beings, their activities, cultures, and societies, and their complex interrelationship with the physical environment.

Nature of Human Geography The nature of human geography is integrative, empirical, and dynamic. It is essentially about understanding the spatial patterns of human existence.

- **Study of Inter-relationship:** The core nature of human geography lies in studying the relationship between the physical (natural) environment and the socio-cultural environment created by humans. It examines how nature (e.g., climate, landforms) influences human activities and how humans, in turn, modify and adapt to their environment using technology.

- **A Dynamic Discipline:** Human geography is not static. The relationship between humans and the environment is constantly evolving with technological advancements and changing societal values. Therefore, the nature of the study is also dynamic.

- **Human-Centric Approach:** It places human beings at the center of its inquiry. It seeks to explain the spatial distribution of human phenomena and how these patterns change over time. It studies the Earth as the "home of man."

- **The Core Debate (Dualism):** The nature of the human-environment relationship has been debated through concepts like **Environmental Determinism** (nature controls humans), **Possibilism** (humans have choices and can modify nature), and the middle path of **Neo-determinism** (sustainable interaction). This debate is central to the nature of the discipline.

Scope of Human Geography The scope of human geography is extremely broad and multi-faceted, as it encompasses every aspect of human life that has a spatial dimension. It can be understood through its various sub-fields:

- **Social Geography:** Studies the spatial patterns of society and social groups. It includes topics like class, ethnicity, gender, and culture. (Sub-fields: Cultural Geography, Gender Geography).

- **Population Geography:** Focuses on the spatial distribution, density, composition, growth, and migration of human populations.

- **Settlement Geography:** Deals with the study of human settlements, both rural and urban. It examines their origin, types, patterns, and functions.

- **Economic Geography:** Examines the spatial patterns of economic activities, including agriculture, industry, services, trade, and transport. (Sub-fields: Geography of Agriculture, Industrial Geography, Geography of Tourism).

- **Political Geography:** Studies the spatial dimensions of political processes and phenomena. It deals with boundaries, nations, states, geopolitics, and electoral patterns.

- **Historical Geography:** Studies the geographies of the past. It reconstructs past landscapes and explores how geographical phenomena have changed over time.

In essence, the scope of human geography is to study and explain the spatial organization of human society. It seeks to answer the questions of "where" and "why" regarding human activities on the Earth's surface.

Quick Tip

To simplify:

- **Nature** is the *'what'* and *'how'* of the subject – what it studies (human-environment interaction) and how it views this relationship (determinism vs. possibilism).

- **Scope** is the *'how much'* – the vast range of topics it covers, from population and cities to economy and politics.

---

25. Show the following by suitable symbols in the given outline map of India and write their names also :
i) The state with the highest density of population.
ii) The state with the largest population.
iii) The state with the highest literacy rate.
iv) The state with the highest Human Development Index (HDI).
v) The capital city of Uttar Pradesh.

Answer:
This question requires locating and marking specific states and a city on an outline map of India. Below are the names and descriptions of the locations for marking.

i) The state with the highest density of population.

- **Name:** Bihar

- **How to show:** Locate the state of Bihar in Eastern India. It is situated south of Nepal, west of West Bengal, and east of Uttar Pradesh. The entire state should be shaded with a suitable pattern (e.g., horizontal lines) and labelled "Bihar".

ii) The state with the largest population.

- **Name:** Uttar Pradesh

- **How to show:** Locate the large state of Uttar Pradesh in North India. It is west of Bihar and south of Uttarakhand. The entire state should be shaded with a different pattern (e.g., vertical lines) and labelled "Uttar Pradesh".

iii) The state with the highest literacy rate.

- **Name:** Kerala

- **How to show:** Locate the state of Kerala on the southwestern coast of India (the Malabar Coast). It is a long, narrow state south of Karnataka and west of Tamil Nadu. The entire state should be shaded with another distinct pattern (e.g., dots) and labelled "Kerala".

iv) The state with the highest Human Development Index (HDI).

- **Name:** Kerala

- **How to show:** This is the same state as in part (iii). The state of Kerala should be located and can be marked with a star symbol ($\star$) inside its boundary and labelled "Kerala (Highest HDI)". This differentiates it from the literacy rate marking.

v) The capital city of Uttar Pradesh.

- **Name:** Lucknow

- **How to show:** First, locate the state of Uttar Pradesh. Then, place a prominent dot ($\bullet$) in the central part of the state to mark the position of its capital. Label the dot clearly as "Lucknow".

> **Quick Tip**
>
> For map questions, it is essential to have a strong mental map of India's political boundaries. Regularly practice locating all states and their capitals. For demographic data like population density and literacy, remember the top-ranking states: Bihar for density, UP for total population, and Kerala for literacy and HDI.